Styles of Romano-British cremation and associated deposition in south-east England

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Dedicated to my father, Rupert Weekes

Abstract

This thesis develops and tests an analytical method of delineating ritual styles within the context of a particular type of ritual sequence: Roman period cremation and associated deposition. Part one deals with theoretical issues, initially discussing the inherent problem of seeking 'monolithic' meanings for ritual sequences, focussing attention on the reconstruction of ritual action from the archaeological record, and developing diagnostic indices (selection and modification of objects, temporal and spatial features) along which ritual sequences might be compared, and profiles of ritual styles at regional, local, site- and burial- level produced. A method that will take account not only of homogeneity but also diversity at these levels is proposed. Current theoretical debates on cremation and associated deposition are then re-evaluated. Finally the methodology used is outlined and discussed, with particular emphasis on transparency of analytical criteria. Parts two and three report findings, developing profiles of cremation and associated cremation burials from east Kent case studies focussed on Canterbury and comparative case studies from Colchester, Essex, and east London respectively. Part four compares the profiles generated in previous chapters, delineating homogeneity and diversity in ritual styles and meaning. Cremation practices appear to have been quite uniform, governed by the need for specialist knowledge and skill; there is some evidence however that pyre side ritual could be more diverse. The data suggest an overall increase in cremation burials in the second and third centuries, and while general traditions in certain components of burials are clear, so too is considerable and increasing diversity at local, and especially burial level in terms of accessories. Each ritual sequence seems to have had the capacity to incorporate region wide references, as well as many more diverse meanings contingent on the locality and even personality of ritual participants and those whose remains were afforded such treatment.

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Part one: theory and method

1. An approach to ritual styles and meanings

Ritual might be described as rule-governed behaviour with an overall and pre-determined purpose. However, as recent anthropologists have noted (Parkin 1992; Baumann 1992, 99), this definition fails to take improvisation, development and variability of ritual behaviour into account. Moreover, it seems to entirely over-simplify the manifold meanings that a ritual action might have, both for the actor and for the audience (Turner 1977 [1967], 50–51; Baumann 1992, 100–102).

A single ritual action or object, then, might allow for the representation of collectively constructed ideas through 'rule governed behaviour' associated with a particular ritual and its perceived purpose, [1] while still allowing room for personal expression, as well as other contingent 'meanings', such as identities relating to familial, occupational, local or regional groupings etc; indeed, personal expressions and group representations might be seen as key factors in the introduction of new types of ritual action to existing ritual sequences, and in the creation of particular 'ritual styles'. From this point of view we might look for the general *form* of a type of ritual (such as cremation and associated deposition) to be reflected in an archaeological record, and at the same time allow for much diversity in the *style* in which various components of each ritual sequence are carried out, arising from improvisation during separate performances (see below).

Variability in the Romano-British period cremation rituals and associated deposits in south-east England is examined here through the development and testing of a systematic approach to the archaeology of ritual action, whereby particular performances of ritual can be profiled through a combined study using four main diagnostic indices (temporal features and spatial features of ritual action; selection and modification of ritual objects; see below). Variability along these indices can be

[1] Ethnographic and historical analogies seem to show that even this 'meaning' is itself frequently contingent upon whom the informant is, or indeed on when, during the ritual sequence itself, the information is given (Weekes 2002a, 19–21).

said to constitute particular 'styles' of ritual. Such a study will provide an increased understanding of which components of a given form of ritual sequence remain relatively uniform from performance to performance, and which allow for diversity; this in turn may throw new and alternative lights on the potentially complex array of meanings associated with such practices.

Ritual Styles and the interpretation of Romano-British cremation and associated deposition

'Burials are not mirrors of life: if anything, they are a hall of mirrors of life providing distorted reflections of the past.' (Härke 1997a, 7).

Härke's analogy admirably presents the mortuary context as one wherein various levels and types of meaning can co-exist. Indeed, a more 'multilateral' approach to the potential meanings of Romano-British cremation and associated deposition is surely called for. In this way we might begin to realise the potential for each ritual sequence to encompass and promote multiple meanings, and move away from reductive views that present oversimplified reasons for regional or local variation, cemetery and burial level diversity.

A broadly systemic approach to the 'meaning' of cremation burials for example might lead to the generalising interpretation that distinct groups of 'elaborated' and 'non-elaborated' burials represent the social class of the deceased in some way. Yet this of course fails to see the mortuary context as a context in itself, with its own scope for expression and representation of variant ideas. We should avoid the generalised classification of ritual sequences as of 'high or low status' simply on the basis of number and types objects in a given burial, for example, bearing in mind the many potentially archaeologically invisible ritual acts that may have contributed to the sequence as a whole.

Indeed, Rick Jones was perhaps already 'fighting a losing battle' in this regard in the early 1980s, in the face of increasing criticism of such a processualist stance, when he argued that 'mortuary practices, insofar as they are reflected in archaeological

remains, can be related to the patterns of the living *somehow*' (1982, 19 [not my italics]). As Pearce points out, a post-processual response in this area is rather the contextual approach perhaps most notably advocated by Hodder (1991):

> '...the contextual position is this, that different treatment at burial does not directly reflect the position of an individual within the burying society but represents a transformation of it, dependent on contextual attitudes to death and the dead' (Pearce 1999, 1).

Even so, comparatively recent writers on Romano-British cremation and associated deposition do not altogether seem to have heeded the warnings from ethnography instigated by Ucko (1969; see for example Williams 2004, 421, and Biddulph 2005, 27 [despite caveats]). We can certainly see that ideas of status in life and death may have partly informed the meaning of mortuary ritual for participants, but should not be expected necessarily to have defined it.

Another generalising approach, a relevant example being Philpott's 'romanisation' of burial practice (Philpott 1991, 218), is basically deterministic. Philpott's interpretation incorporated the suggestion of a 'top down' policy to bring about change from 'native' to 'Roman', citing Tacitus, *Agricola* 21 as possible evidence of official dissemination of a type of '*Romanitas*' in the mortuary sphere. Millett (1996 [1990], 69) successfully criticises this understanding of 'Romanization', which after all is derived from but one source, which itself was written by Roman writer from a dominant colonial viewpoint. Millett and more recent writers increasingly put the 'native' contribution to 'Romano-British' culture to the fore. For example, Webster (2001) argues for a process of 'creolization', which can broadly be described as a two-way mixing between cultures, producing a third, unique blend, as opposed to the perceived one-way process of acculturation implied by 'Romanization'. As encapsulated by Harke's reference to 'a hall of mirrors of life' (above), the mortuary context is likely to add yet another 'filter' for such a referent (Pearce 1999).

Philpott's approach also highlights the fact that 'Romanization' has tended to be conceived as a process of change from one objectively defined 'archaeological culture', i.e. 'native' in this case, towards another, i.e. 'Roman' (1991, 218–224). Moreover, from this standpoint such archaeologically defined human groups in the

past are seen to be reflected in a straightforward way through use of 'native' or more 'Roman' objects (S. Jones 1997, 36–38). This very basic connection between supposed human groups and material culture is not reflected ethnographically and is generally no longer accepted archaeologically (see Shennan 1994 [1989], 5–14 for effective critique of such a view). As S. Jones argues, '(T)he case of Romanization illustrates that abstract cultural and ethnic categories remain a fundamental part of the conceptualization of the past in archaeology despite critiques of culture-history' (1997, 38).

From an economic perspective, Philpott suggests that:

> '(I)n part the change in furnishing of cremations in the 1st and 2nd century is due to the greater availability of manufactured items in the Roman period, while the gradual development of the economy particularly in the south east brought such objects within the purchasing power of a far wider section of the population…' (ibid, 219–220).

In the sense that people were able to choose objects for ritual purposes from a wider selection of types, this is a truism; it focuses our attention on the passive availability of materials, rather than the active *selection* of materials by people for ceremonial purposes. Bearing availability in mind, we should perhaps more reasonably ask why some objects were considered 'suitable' for the mortuary context, and some plainly were not. Why are there apparently no examples of increasingly available *mortaria* in cremation burials in the south-east, for example (as Biddulph notes, 2005, 36)? Examples of samian *mortaria* from the recently published Brougham cemetery appear to evidence a cemetery level, localised or even smaller scale tradition in the north [Cool 2004a, 348]).

Biddulph takes issues of pottery supply and selection for mortuary ritual to a more specific level in his recent paper (Biddulph 2005, 36–38), through application of the type of comparative analysis pioneered by Going (specifically Going 1987, focussing on Roman period Chelmsford) to correspondence analyses. Biddulph approaches the issue of selection of vessels 'intended for burial' through

'… three models of acquisition…

1. Reserve vessels within the household

2. Purchase of specific pottery at the time of the funeral
3. Burial societies' (*ibid*, 37).

This classification (although reductive and embodying clear assumptions around 'reserve vessels' and 'purchase' of vessels for example) is certainly worth considering as a starting point in terms of the availability of certain materials for ritual purposes. Yet to apply unqualified economic notions of supply and demand, and even (by implication) so called 'market forces' (*ibid*, 23) to the mortuary sphere is once again to ignore the significance of specialised *selection* of objects for a *ceremonial* context, where issues other than availability have surely to be accounted for. Moreover, comparison of broadly defined mortuary and non-mortuary 'assemblages' (i.e. whole datasets derived from diverse archives and excavation circumstances, see Biddulph 2005, 27ff) will also highlight the prevalent in archaeologically bounded groups of data at the expense of the specific selection of objects in particular ritual sequences. Availability of objects is yet another possible contributor to the overall profile of a given ritual sequence.

A deeper understanding of the complex relationships between objects in the mortuary context and in other spheres requires a more concerted contextual approach to the data (e.g. Pearce 1999). Such is beyond the scope of this study but can be suggested as a potentially fruitful area for further, related research (see Chapter 11).

From a slightly different viewpoint, Philpott's earlier study also relates sporadic selection of certain types of object (for example coins, lamps, glass phials) to a broadly defined 'Roman' influence on afterlife belief (1991, 237–8). Such an approach seems to be a reflection of contemporary scholarship, which suggested that direct associations between various objects found Romano-British burials and ideas concerning the afterlife derived from Classical sources might be viable (Alcock 1980; Black 1986). While recognising the possibility of Classical influence on Romano-British afterlife beliefs and rituals through cultural contact, such an influence can again be reconsidered as a potential contributor of meaning to a multivocal ritual context.

Moving from the 'etic' to the 'emic', the concept of ethnicity as a self-conscious expression of group identity is less deterministic and might be considered with regard to regional variations in the data. However, various objectivist and subjectivist uses of the term 'ethnic' in diverse academic and other discourses have generated multiple definitions (S. Jones 1997, 56–65). The main problem with its application to the findings of this study concerning cremation and associated deposition is that it only generally refers to conscious expressions or representations of relatively large-scale group identities.

No matter how relative, situational or 'multidimensional' (*ibid*) our perception of ethnicity (i.e. we might argue that actors are likely to project different statements or symbols of group identity depending on levels of interaction with 'other' groups, and even on circumstance, see S. Jones, 1997, Chapter 5), ethnic identity still focuses on expressions of group identity, at the expense of any other facets of the life or 'personality' (however defined) of the particular actor, or agent. To treat regional, local, site- or burial level diversity in cremation and associated deposition only as possible 'ethnic' variation would seem to be a highly reductive hypothesis, dealing with but one potential facet of meaning in what is surely a multivocal medium.

Another generalised view of ritual and belief worth reassessing concerns the use of vessels with apparent food and drink associations in cremation burials, and therefore the supposed symbolic provision of an afterlife meal (see Black 1986). Such a definition is perhaps implicit in Philpott's 'typical' suite of vessels in burials (1991, 35), and certainly informed his later discussion of 'nourishment for the dead' (ibid, 237). Pearce also sees the provision of such objects as symbolically representing at least funerary feasting (1999, Chapter 8).

Williams has taken the idea of 'association' between food preparation and consumption and cremation ritual in general in a novel direction in a recent article, suggesting a connection (broadly psychological) between memory, funerary food preparation and feasting and the act of cremation itself: '... food and drink also provided a multi-sensual mnemonic and metaphorical link between the cremation of the body and consumption ...' (Williams 2004, 421). Williams goes on to posit the continuation of such food/memory associations in the burial pit (*ibid*). This is an

interesting viewpoint, although Williams rightly points out that '(A)dmitedly, the argument... offers only one... reading of the role of ceramics and social memory in early Roman cremation rituals' (ibid, 424). The latter can be taken as an acknowledgement of the necessity of allowing for a variety of meanings in the ritual context. Once again, then, a generalised 'meaning' of the ritual of cremation and associated deposition can be put forward as a possible contributor to the overall experience of a given ritual sequence (incidentally, Williams does not appear to tackle the issue of how conscious of such allusions various ritual actors might have been).

In a 2002 article focussing on the burials at Each End, Ash (one of the case studies considered in detail below) Biddulph rejects the 'common interpretation' of symbolic connections between deposited vessels and food preparation and consumption (Biddulph 2002, 101ff; see Hicks 1998, 115), on the basis that spatial arrangement of objects in burials should be considered as significant as vessel types and associations.

Unfortunately, Biddulph's own approach in this regard is not as helpful as it initially promises to be, when interpreting the 'function' of vessels that have been inverted in the burial pit, or apparently deliberately mutilated:

> '(S)ince the idea that vessels carried food offerings depends on the vessels retaining both function and form in the burial, it is reasonable to suggest that if the primary function of a vessel could no longer be carried out in life, the vessel could not function in death...' (*ibid*, 105).

Such a position plainly fails to take into account the potential multivocality of symbols (Turner 1977 [1967], 50, 52) and multi-layering of meaning in ritual. In the ritual context, because symbols can be multivocal (even to the same person), a dish can be representative of the sort of offering that might have been placed on it (as Biddulph also argues in the same paper [*ibid*, 104]!), and *at the same time* be inverted to act as a lid over another vessel. Even then it can retain the connotations of its function 'in life', as well as other meanings. All such meanings can co-exist 'within' the same symbolic object and *are not mutually exclusive*.

A 'unilateral' approach to the meaning of ritual objects and actions can lead to some quite obscure yet apparently generalising conclusions:

'...we can impose meaning on the vessels. So, an inverted wide and shallow vessel placed over the mouth of the urn is labelled a dish, but in functional terms it is a lid, because the vessel no longer functions as a dish. At once, the food connotations are disregarded. Similarly, a beaker placed inside an urn should now carry no explicit drink-related meaning, but a purely conceptual one based on its placement. Perhaps it should be classified as an 'insider'...' (*ibid*, 109).

Quite apart from the epistemological problems inherent in 'imposing meaning', it would seem clear that multivocal symbolic objects such as 'dishes' and 'beakers' can sustain their 'dish' or 'beaker' reference, along with many other associated meanings including 'food' or 'drink', even if also used in a way that invokes other concepts, such as 'lid' ('insider' is arguably far too abstract, and fits more easily into Biddulph's 'archaeological' classificatory bracket, than the mind of an original ritual actor).

Pearce has offered a more multivalent interpretation with regard to the 'meaning' of objects such as food and drink vessels, as well as 'toilet sets' and gaming counters, and so on in Roman period cremation burials, arguing that the overall symbolism 'invokes a cluster of recurrent associations, of dining, the world of hygiene, and appropriate leisure [that] suggests the central themes of social reproduction', and remarking that:

'(I)n this regard the most important aspect of burial assemblages is that they reveal the broad adoption of a Romanised lifestyle...(I)f burial represents equipment for an afterlife of pleasure, then pleasure had been Romanised...' (1999, 8.4).

We can see that as such the mortuary context may allow for the construction and display of perceived forms of mortuary '*Romanitas*' whether or not this reflects the 'lifestyle' of ritual actors. Yet once again this is a potential generalised meaning for this overall form of ritual, and should not preclude concurrent alternative readings of the ceremonial sequence for original participants.

A single 'logic' or a uniformity of meaning would not seem to be fundamental to the ritual context. It is not at all nonsensical, for example, that informants might describe the act of cremation as the point where the soul of the deceased is 'driven out', and

yet still bury a token amount of the burnt bone retaining continuing associations with soul of the deceased, complete with 'grave goods', perhaps symbolically provided for use of the deceased. Thus we again cannot agree with Biddulph, who seems to endorse the idea that a final deposition of cremation related objects is a somehow redundant exercise: 'unburned goods placed within the burial pit were deposited too late to accompany the spirit to the afterlife. A purpose of cremation was to release the spirit from the dead body' [2002, 107]. Such 'eminently practical' [*ibid*, 108] understandings of the ritual are at odds with the reported thoughts of literary, historical and ethnographic informants (for Homeric, ethnographic and historical examples, see Weekes 2002a, 19–21) and are most unlikely to be identical to those in the minds of original actors, ancient or modern.

I recently observed an interesting example of this phenomenon. During a cremation (March 2004) the cremator operator and I noticed, some way into the firing, that the 'charge' (corpse being cremated) had been placed in the coffin wearing spectacles. Yet the spectacles would obviously be destroyed along with the corpse and the coffin through cremation, so what should we make of the rather impractical and illogical inclusion of this object? Several suggestions can be intuitively offered: perhaps the glasses were so much an integral part of the appearance and identity of the person in life that they continued to be so 'in death' so to speak, or it might be that the glasses were symbolically provided in order that the 'soul' might be able to 'see properly' in the afterlife, or that no further use was seen for the glasses, or that 'ownership' was seen to continue 'beyond the grave' or whatever. Actually, in the ritual and ceremonial context, all such meanings might be held concurrently by different or even the same participants. The 'logic' that the soul was held in Roman Britain to be released by cremation, and that grave goods therefore have nothing to do with symbolic nourishment of the deceased is at least equally fragile.

Conversely, not even a practice of revisiting and of continuing deposition at the 'grave' in Roman Britain would necessarily have precluded ideas that the 'soul' of the person whose funerary event the burial represented had already 'moved on', either at death or through being 'released' by the act of cremation. It is possible, for example, that to some at least, cremation burials did not merely represent the 'resting place' of the dead, but just a significant place of connection, through which some form of

contact or influence on the 'afterlife' of that person might be maintained. From such a viewpoint, the deposited human remains, modified almost beyond recognition, might retain, like saint's relics, a symbolism through association. Of course, seeing the burial site as 'simply' a place of commemoration is also a potentially reductive view.

Most importantly, we should be careful to avoid the trap of large-scale generalisation in this area. Biddulph's more recent comment on the 'Roman-ness' of ceramic assemblages in Essex burials is a case in point. Referring to depictions of a jug, a dish and a bowl on a Trajanic tombstone from Rome by way of comparison with the ceramic vessels that make up his Essex assemblage, Biddulph asserts that '(T)he meaning behind the vessels is the same, whether in Rome or Great Dunmow; it is just the medium of the message that differs' (Biddulph 2005, 42).

Evidently 'meaning' can be far more localised than this, as attempts to interpret ritual sequences in particular places (see Cool's more recent detailed reconstruction of the sequence at Brougham, Cumbria: Cool 2004a) appear to demonstrate. Pearce's interpretation of the overall ritual practiced at King Harry Lane, St. Alban's, is one that attempts to delineate various scales of meaning in terms of the construction of identities:

> '... (I)t is possible that the sequence of processes represents the way in which the individual was transformed into one of the homogenous dead. Age, gender and individual identity were referred to in the earlier stages ... of the ceremony. In the later phases, however, age and gender are not distinguished, and individuality is expressed only within the norms of a fairly homogeneous common rite. Although at different stages certain individuals were isolated by the wealth of objects placed with them ... it was not always the same individuals who were accompanied by the largest number of objects. Nevertheless, some assertion of individual identity in the final stages of the rite may represent a contradiction between establishing the identity of the homogeneous dead and the remembrance of the dead individual' (1997, 178).

This apparent 'identity crisis' might be more understandable if we allow that expressions and representations of different types of identity might be afforded by and within the same ritual sequences. Each ritual, even if participants attempt to follow given 'rules' governing behaviour, is still a separate, original and creative event. So rather than a single, all-pervasive *hieros logos*, or general meaning underlying the

entire ritual, there is room for much deviation from the perceived traditional 'norms' of 'rule governed behaviour'; it is such improvisations that might emphasise, factional, local or even personal preferences.

Rather than thinking only in terms of general meanings of a given form (in this case Roman period cremation and associated deposition) or aspect of ritual, we need an approach that will allow for and perhaps help us to clarify various scales of reference and the potential for diverse and *plural* meanings of symbolic actions and objects within each ritual sequence. Such a view might elucidate general aspects of the rite as a tradition, and also suggest a spectrum of more regional, local, situational, and even personal aspects.

A helpful concept in this regard is that of *style*, as opposed to what we might call *content* (symbols) and overall *form* (relating to the general tradition, such as cremation and associated deposition). As Shennan has pointed out (1994, 18–20), recent developments in theoretical approaches to style, principally through the work of Wiessner (1983; 1989), offer a much more accommodating approach to variability in material culture, which, I suggest, has the capacity to reflect and provide interpretive frameworks for general aspects of the rite and improvisation through actions and objects within specific ritual sequences.

Wiessner's delineation of 'emblemic style' (1983, 157), as a conscious reference to group identity, would evidently incorporate 'ethnic' referents (e.g. "Roman"), and possible membership of other groups (such as a priesthood), while 'assertive style' (*ibid*, 258) may be conscious or unconscious, and 'has no distinct referent as it supports, but does not directly symbolise, individual identity'. Later work on the same theme has recognised the conditional status of stylistic referents, and the operation of 'identification by comparison' whereby certain potential stylistic components might become more or less significant (or 'emblemic') as a result of changing circumstances: '(I)f during times of change an item takes on new social and symbolic value, its profile of variation may change radically' (1989; as quoted by Shennan 1994, 19). Overall, a 'stylistic' view of variability in ritual is most useful because of the fluidity it allows in terms of meaning and action in relation to both general and specific contexts.

Härke points out that there is an inherent conflict between interest in *the meaning* of symbols in the past and the maintenance a relativist stance to culture:

> '...so we can never, with any certainty, decipher the meaning of symbols we are told make up the archaeological evidence' (Härke 1997b, 194).

However, bearing in mind the limitations of our own cultural conditioning, the multivocality and probable layering of meaning in each ritual sequence might be approached through controlled application of various theories of 'meaning' to a given ritual form. Such an understanding would be multidimensional and inclusive, rather than unilateral and reductive. Treatment of the ritual form in question from the perspective of style (as outlined above) allows for more, as well as more complex, nuances of meaning to be suggested and explored. Such an approach to interpretation, therefore, calls for a delineation of styles of Romano-British cremation and associated deposition.

Components of 'ritualisation'

It is through specific emphases of temporal and spatial aspects of action that an action is ritualised (see Bell 1992; 1997; Weekes 2002b); we can deduce a *temporal feature* of a ritual action when that action 'must' be performed at a certain time within the ritual sequence, or when it should be performed for a certain length of time, or be repeated a certain number of times, etc. (*ibid*, 76–77; see van Gennep 1960 [1909]; Turner 1977 [1967];[2] 1969; Humphreys1981; Metcalf and Huntington 1992; Parker Pearson 1999, 142–144, Pearce 1997; 1998; Fitzpatrick 2000). We can deduce a spatial feature of ritual action when it emphasises a certain 'place' or movement between 'places', through positioning, patterning, procession etc (*ibid*, 75; see Turner 1969; Hodder 1984, Parkin 1992; Parker Pearson 1993; 1999, Chapter 6; Pearce 1998; Williams 1998 etc).

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[2] 'a ritual, like a space rocket, is phased...' (Turner 1977 [1967], 52).

We should also recognise two further types of specialisation that serve to ritualise objects, and that provide further indices for variability in ritual style.

First, it is important to take account of the particular selection of materials for ritual purposes, to assess variability in exactly which types of object are chosen for the ritual, and are therefore ritualised. This is perhaps the area that has been most covered in the archaeology of Romano-British funerary ritual (e.g. Philpott 1991), although the reason for interpreting a given object as 'ritual' in nature has perhaps too often been based on an intuitive assessment of find context, rather than a systematic evaluation of the suggested combination of selective and spatial components.

Second, specialised modification of an object is of course an emblemic characteristic of ritualisation. It is important to evaluate evidence that objects have been deliberately modified (e.g. burnt, broken, bent, or in fact changed in any way) during the ritual process, as well as any variability in such modification. Again, this is a factor that has long been recognised (see Merrifield 1987, 30–31; 91–93; 186–187), although perhaps also too quickly conflated with constructions of 'meaning' (the ritual "killing" of objects, for example, see Biddulph 2002). The degree and type of modification of objects, then, are other ways in which ritual styles might vary.

As has been noted, temporal and spatial components of ritual actions, as well as the selection and modification aspects of ritual objects, have often been considered before (although the analytical need to treat stylised actions as separate from constructs of meaning has more generally been overlooked). However, rather than looking at all these ritualising factors separately, I suggest a combined method, taking all four areas into account. It is this articulated approach to ritual variability as evidenced by the archaeological record that is formulated and tested here in relation to Romano-British cremation and associated deposition.

As John Pearce and others have shown, evidence for the entire mortuary ritual sequence leading to the deposition of cremated remains and beyond can and should be classified and interpreted (see in particular Pearce 1997; 1998; see also Fitzpatrick 2000; Weekes 2002b). Pearce's approach to the data, introducing temporal considerations and isolating the types of evidence that can be used to reconstruct

various stages in the sequence, is best summed up in his table 'Table 1. Death to Deposition', reproduced here by kind permission of the author:

Stage	*Sources of evidence*
Pre-pyre rituals	Cemetery structures, cremated bone
Pyre-location, orientation, construction, efficiency, pyre goods	Pyre and *bustum* sites, pyre debris, cremated bone
Pyre-side ritual	Pyre debris, *Aschengruben*
Collection from pyre	Cremated bone, presence/absence of pyre debris
Grave-size, orientation, arrangement and deposition of grave goods	Cemetery and grave plan, grave goods
Marker	Tombstone, mausoleum, barrow, enclosure and other markers
Commemorative feasting, sacrifice etc.	*Aschengruben*, animal deposits, ceramics, coin hoards etc.

Figure 1.10: Pearce's table 'Death to Deposition' (1998)

The reconstruction of the cremation ritual sequence developed in this thesis augments and re-articulates this type of framework according to the diagnostic indices of temporal and spatial features, selection and modification of materials as outlined above, the focus here being on delineating levels and types of 'homogenising' or 'diversifying' of ritual styles at each stage of the sequence.

'The homogenous dead' [3]

In order to deal with the complex nature of overall ritual profiles it is necessary to look at traditionally separate datasets in synthesis. Simply carrying out a quantitative analysis of different components of burials in turn (see critique of Philpott's method below) often seems to outline broad trends in the data (that we might associate with localised traditions or regionalisation, for example) at the expense of a realisation of

[3] The term used by Pearce in his interpretation of late Iron Age/early Roman burials at King Harry Lane, St. Albans (Pearce 1997, 178).

diversity at site and individual burial level. Again, by looking simply at numbers and types of objects, rather than combinations of objects at the same and different stages of the sequence, we are more likely to notice the uniform rather than the particular.

A good example of the generalising view is provided by Philpott (1991), who initially attempts provide a 'broad outline' of the cremation ritual in south-east England in the Roman period, while admitting that such a model 'obscures much detailed regional and chronological variation' (*ibid*, 8).

This generalised 'template' has remained popular among archaeologists and can be paraphrased as follows:

1) Romano-British cremation ritual in south-east England was practiced from the mid- first to early third century A.D.,
2) Most cremations were conducted on pyres away from the final burial site
3) After cremation, the bones were collected, and placed in either a pottery jar, or other ceramic vessel, or less frequently a glass vessel, or a wooden casket, or organic containers,
4) The newly housed remains were then placed within a usually oval, or otherwise square or rectangular pit. The pit was also sometimes elaborated with a lining of wood or stone slabs [or ceramic building materials] or a basket; moreover, '(S)ome communities consistently placed their cremated dead in a substantial container, such as an empty amphora or a wooden box. Occasionally brick chambers or vaults were constructed to receive the mortal remains',
5) Cremation and burial '*in situ*' (i.e. *bustum* burial, see below) was a relatively rare practice,
6) 'Pyre sweepings' were not usually placed in the grave,
7) 'many burials' were 'furnished' with additional objects, most frequently pottery vessels, which could exceptionally number up to fifty or more, but more often numbered between one and three. Although specialised forms like lamps or *tazze* were occasionally deposited, the range of additional vessels was 'in general' limited, the apparent norm being 'flagons or bottles, cups or beakers, and bowls or platters',

8) Some cremation burials included 'fragmentary objects which [had] been burnt on the pyre',
9) 'The range of non-ceramic artefacts found with cremation burials is restricted', and generally includes 'personal ornaments (brooches, bracelets, pins, finger-rings, beads), toilet equipment (notably mirrors, tweezers), shoes, coins, lamps and glass unguent phials…' and less commonly '…and probably deposited on an individual basis… items such as *styli*, belt fittings, textile or weaving equipment, and knives' … (Philpott 1991, 8).

This overall scheme of Romano-British cremation and associated deposition is a helpful starting point in placing the variables of a particular site, for example, within a bigger picture. But despite its apparent usefulness as a sort of typological index of 'the sorts of things one might expect to find in a cremation burial' there are obviously inherent analytical problems in generating such a broad model (arguably only partially solved by Philpott's ensuing, more detailed analyses). Such an approach might be used as a kind of shorthand, but the potential for extreme variability in ritual action that it glosses over surely needs to be accounted for.

Indeed, Philpott's model is so full of contingencies that it makes less and less sense as a model. The range of non-ceramic artefacts does not sound very 'limited', for example, and the list given by Philpott is actually far from comprehensive or exhaustive. Rather than looking for ways of characterising the 'typical', perhaps we should be asking why there is so much diversity, especially at the deposition stage.

At another scale, more recent syntheses have also attempted to 'characterise the rite' of a given site in a simplified form. Even Pearce for example, who pioneers increased consideration of the selective, temporal and spatial aspects of ritual sequences in his 1997 analysis of the King Harry Lane, St Albans cremation and deposition rites, initially describes the '…'typical' burial… [which] consisted of a cremation contained in a jar or beaker, local or imported, sometimes accompanied by one or more accessory vessels, by one or more brooches, and occasionally by other articles of decoration, dress or personal care…'(Pearce 1997, 174).

Again, arguably, as the variables of such a characterisation build up, it increasingly becomes less a definition of 'typicality' and rather a definition of diversity. Distinct patterns of ritual associated with gender/age and local tradition might be delineated from the evidence (as Pearce goes on to show), but even so there is often a degree of variability in the evidence that defies rationalisation into such site level patterning, and that consequently might result either from specialised, rare or unique ritual actions at the level of each particular ritual sequence (each cremation and associated burial(s)), or wider patterns such as horizontal or vertical social differentiation, regional and/or chronological trends perhaps invisible to site specific analyses.

The amount of chronological resolution afforded by the data as well as degrees of uniformity in dating methods between sites are obviously significant caveats here, yet the actual contexts/causes of such patterns of stylisation (either in homogeneity or diversity) might be more clearly delineated either by adopting a more qualitative approach to particular burials, or by conducting a broader survey. The use of both methods in tandem may lead to a better understanding of ritual styles in context.

To continue with 'King Harry Lane' by way of example, perhaps we should reconsider the sporadic deposition of metal objects other than brooches at this site (brooches were widely represented in the King Harry Lane sample) such as knives, mirrors etc. Pearce points out that these 'were much fewer in number; apart from knives none of these categories were represented by more than six examples. Likewise they show no association with any one age or gender group or location, but their numbers were too small to argue this at a statistically meaningful level' (Pearce 1997, 177–178). Yet the fact that a statistical method cannot account for the selection of such items might point to deposition on a more particular basis in contradiction to the homogenising factors evidenced by broader patterns recognisable in the data, unless on the other hand such components belong to trends only visible beyond a site-specific analysis.

Moreover, the comparison of more generalised profiles from study areas (see Pearce 1999), while useful in delineating large scale regional models of burial furnishing, will evidently focus on the regional, at the expense of the local and the particular. And yet the local and the particular burials can be seen to represent particular expressions

of the more general ritual scheme, and are of at least equal significance in understanding the nature and potential variability of that scheme. A homogenising methodology will have an impact on interpretive flexibility, as Biddulph has recently stated, specifically in relation to 'pre-understandings' as regards the perceived functions of accessory vessels within cremation burials:

> '(I)n the desire to reach an understanding of the broad picture – in this case, the functional character of a ceramic assemblage – we lose the significance of the 'pixels' on which that picture is based... we are creating interpretative straitjackets. The homogeneity of resulting groups allows for little recognition of variation within them...' (Biddulph 2002, 106).

Homogenising methods

Major syntheses studying local and regional variation in Romano-British burial practice (Jones 1982; Philpott 1991) have not surprisingly tended to focus on cremation related deposition rather than cremation itself in order to make comparisons between cremation and inhumation. Much subsequent work has developed theory and methodology with regard to the diagnostic qualities of cremation deposits and the reconstruction of pyre techniques, pyre goods, etc, and these are critically reviewed in Chapter 2.

In terms of deposition of cremated remains and associated objects, methods (informed by homogenising theory) have tended to have a homogenising effect on the data. Jones' 1982 survey of 'Cemeteries and burial practice in the western provinces of the Roman Empire' for example was concerned with 'broad systems of burial practice followed by the bulk of the populations...' (1982, 17), and was written in an atmosphere of established if faltering processual confidence in the direct diagnosis of social systems from patterns in burial data. More significant for the moment however is Jones' citation of Wheeler (who was himself apparently quoting Pitt-Rivers), arguing that 'common things are of more importance than particular things, because they are more prevalent' (*ibid*). This seems to form the tenet of Jones' study, despite an impressive attempt to codify a large number of types of object that have been

found in burials in his study area as well as interesting spatial features as potential variants to be included in a computer data base (*ibid*, 202–203, Table 1.1).

When it comes to analyses, Jones appears to eschew complications of diversity that must be held in such a database in favour of homogenising data in order to generate less complicated models. For example, Jones attempts to rationalise Down's classification of diverse burials at St. Pancras, Chichester on the valid grounds that Down's sub-types are not mutually exclusive (*ibid*, 80):

Jones' Classification	No. in group	Down's Classification	No. in group
I. Cremations in urn	69	1. Cremations in urn	147
II. Cremations with 1 vessel	24	2. Cremations with food vessels - total	104
III. Cremations with rich grave goods, but no coffin	48	2a. Box burials	33
		2b. Tile cist burials	3
IV. Cremations with rich grave goods and coffin	26	2c. No box or cist	64
		2d. Crescentric	3
		2e. Inverted pots	0
		2f. Coin burials	6
V. Inhumations	5	2g. Pipe burials	1
		3. Inhumations	9

Figure 1.11: Jones' rationalisation of Down's cremation burial sub-types (Copied from Jones 1982, 80). [4]

Instead of increasing the capacity of classification in order to incorporate further diversity at burial level, Jones' answer is to fit all burials into broader categories bounded by less complex criteria:

> 'What is gained in this new classification is a broader view of the overall pattern of burial practice followed. Some of the minor variations picked out by Down... are masked in the new classifications, which emphasises larger groupings with general similarities' (*ibid*).

[4] Jones leaves out disturbed burials.

With such a method it is perhaps not surprising that Jones later comes to the general conclusion that '(H)omogeneity was the pattern of most sites...'(*ibid*, 198). Diversity has been masked by method.

Philpott's approach to data available from Roman Britain as a whole (1991), categorised 'grave treatment and furnishing' first of all in terms of secondary containers of the remains such as cists of various types, boxes, caskets and amphorae (1991, 9–29), before going on to look at pottery both as container of cremated remains and as accessory vessel (*ibid*, 30–44), and subsequently dealing with various other types of accessories (*ibid*, 103ff). In each case the analyses consider the same dataset purely in terms of a single category of component, with the result that the same burials are discussed in different ways and diversity of overall assemblages within each burial is lost. This fails to treat each burial as a separate event, and only gives a generalised view of the sorts of objects that might be included in burials at any given time, rather than the combination of objects (let alone spatial features and other aspects such as modification).

The fact that three adjacent and contemporary 'amphora burials' have different numbers and types of accessory vessels and/or other accessories, that may be modified or placed in different ways, is not accounted for by this type of analysis, and neither are variations even within the same category of object at site or local level, as Philpott himself appears to acknowledge:

> (A) simple comparison of furnishing levels over time between cemeteries from different settlements may confuse chronological trends with other possible influencing factors such as local burial traditions, social status or wealth, ethnic origin and so on (*ibid.*, 30).

Apart from the need to more clearly acknowledge mortuary ritual as a specialised context for display, expression and representation of the identity of the living (Pearce 1999), Philpott's approach simply lacks the capacity to take improvisation and diversity of ritual styles into account: we need to compare site level patterns with regional and chronological patterns, and to compare the components of particular burials with site level patterns.

Even where Philpott does investigate combinations of certain objects in more detail, he seems again to value the 'prevalent' above the diverse, and the generic above the particular. For example, even a sample of Kent and Essex sites from Philpott's 'Table 11: Forms of Pottery in Cremations' (1991, 34) seems to positively shout diversity of vessel combination:

	JFBD	JFD	JFB	JBD	FBD	JF	JB	JD	BD	FB	FD	J	F	B	D	A	0	Total
Ospringe	25	15	30	9	10	16	17	8	5	9	3	23	11	4		6		186
Canterbury	4	2	2	3		2	1				1	10	1		1			27
Kelvedon	3						3					13		2	2		9	32

Figure 1.12: Sample adapted from Philpott's 'Table 11' (1991, 34), comparing combinations of vessel types in cremation burials (J= jar, F= flagon, B= beaker, D= dish, A= amphora only [the latter correction of Philpott's criterion]).

We can see that 17 categories of vessel combination (including category of 'no vessels') are found in varying numbers at the different sites, and these categories are themselves reductive (see Philpott's own notes; *ibid*, 35), yet Philpott comes to the generalised conclusion that:

> '(A)t least by the 2nd century, there is a distinct preference in the south east of England for grave groups consisting of three or four vessels of different forms, a jar to act as a cinerary urn, a flagon, a beaker or cup, and platter or bowl…' (*ibid*).

This presents a homogenised picture which confuses the functional *types of vessels most often selected for burial* in a general sense, with the *combination of such vessels* within particular burials. In fact the data presented by Philpott himself hardly bear out his assertion, and the reality would seem to be that numbers and combinations of vessels can be highly diverse from burial to burial, even within the confines of the same cemetery site. The overall picture that one might derive from the table is that there are significant groups, either with no accessory vessels (Philpott's 'J' group) or diverse combinations (as this research elucidates further, see Chapter 11), although phasing of such groups is also an issue not accounted for in this example. Combination of vessels with other types of object would complicate the matter even further.

A proper comparison of ritual sequences would surely treat each entire ritual sequence (as evidenced primarily by each cremation burial) as the primary analytical unit. This would mean codifying the entire contents of each burial for comparison with other burials, as well as taking other aspects of each ritual sequence such as cremation and collection methods, modification of objects and spatial features into account. Only through reconstructing and comparing individual ritual sequences in entirety can we hope to understand broader trends and patterns of action in context.

2. Cremation

Pre-pyre?

It may seem obvious that what would seem to be the primary material focus of the cremation ritual, the remains of the deceased, is already 'selected' by death; yet ethnographic evidence suggests that perceptions of the 'type' of person deceased (status, gender etc) and also the type of death, are likely to be the cause of variability in ritual action (see Middleton 1982). Any profile of ritual style should attempt to identify whether or not there is a 'type of person' who is given such ritual treatment in any given family, community, circumstance etc, and a 'type of person' who is not. Pearce, for example, analysing the late Iron Age/early Roman burials at King Harry Lane writes: '(T)he most striking pattern remains the initial selection of predominantly adults and males to receive this type of burial: the buried population was not a 'normal' population' (Pearce 1997, 178). It would however seem advisable to reserve such judgements, given that the particular analytical criteria of different specialists would appear to have an impact on their findings in this area (see case studies, below).

It has been argued that some modification of the corpse prior to cremation can be suggested by referring to two types of evidence, these being (as Pearce [1997, 176–177] notes): the existence or not of associated structures within or close to the place of burial, that may have acted as 'mortuary enclosures' (several structures associated with the Iron Age cemetery recorded at the Westhampnett site in West Sussex were interpreted as 'shrines' [Fitzpatrick 1997; 2000; 22–24]), and patterns of fracturing of cremated bone.

The presence of mortuary structures or enclosures might indicate, at least in some cases, a period of 'laying out' (and perhaps display and associated ceremonial) of the human remains prior to the cremation phase; this may reflect a choice (in some cases at least) to carry out such a procedure in the area of the deposition site, as opposed to, or perhaps as well as other 'places', like the home, or an equivalent to a 'chapel of rest' or mortuary (for ethnographic and specifically Roman period analogies of such

practices, see Metcalf and Huntington 1992 [Bara rites] and Toynbee 1971, 44 respectively). There are also of course more 'specific' spatial considerations here. For example, at Folly Lane, St Albans, an apparent mortuary structure consisted of a central chamber with a possible ambulatory for procession and viewing of the corpse 'lying in state' (Niblett 2000, 98—100). We might also take spatial and ritual relationships between such enclosures/structures and possibly associated pyre sites, deposition contexts, etc into account.

Certain patterns of fracture of cremated bone have also been suggested as evidence of pre-pyre exposure of the remains to the point of excarnation of the corpse. Pearce states that patterns of fracture at King Harry Lane were 'consistent with burning whilst flesh still adhered to the corpse' (Pearce 1997, 176, citing Stirland 1989, 241). Stirland (1999, 45) recalls the application of this approach in relation to Bronze Age cremations from Leicestershire (Stirland 1981). The original bone report on the Leicestershire cremations reveals that the suggestion of excarnation was in that case derived from several different types of evidence, relating to localised burning and the possibility that disarticulated remains had been burnt 'as bundles' *in situ*. The bone evidence offered for this interpretation specifically referred to 'the case of F49, which shows *less* [my italics] distortion and calcinations... than the others' (*ibid*, 19) Stirland cited Brothwell (1972, 19) as a precedent for this type of interpretation.

Contrary to this, McKinley (1989, 66) seems to have suggested that increased dehydration of the bone through burning (diagnosed through *high* levels of shrinkage of spongy bone, and twisting of compact bone) may indicate pre-pyre excarnation of some sort, when she wrote that the 'degree of alteration in the form of the bone may well indicate both speed and completeness of dehydration, and reflect the height of the temperature *and possibly even de-fleshing or not of the bone* [my italics].'

However, such an approach appears later contradicted by the same writer, who, in a more recent synthesis of the types of evidence available from the study cremation remains, clearly states that '(T)he earliest identifiable stage of the cremation rite evident in the archaeological record is represented by the pyre site' (McKinley 2000a, 38), and makes no mention of any diagnostic properties of cremated bone in relation to suggestions of pre-pyre excarnation practice.

On balance, and chiefly as a result of McKinley's close observations of the processing of human remains at 'modern crematoria' (1989, 65–66; 1994b, 72–76; as well as drawing on personal observations, see below), it is perhaps more advisable to interpret the shrinkage and distortion of well burnt bone as likely to result from increased oxygenation during cremation, rather than excarnation at the 'pre-pyre' stage. McKinley also records occasional instances when soft tissue residues have been identified within cremation deposits, which again would tend to tell against pre-pyre excarnation in some cases at least (see McKinley 2000b, 269).

The selection and use of certain additional types of objects at the pre-pyre stage of Romano-British mortuary ritual is evidently difficult if not impossible to reconstruct with any great certainty. Perhaps the only category of evidence that might help in this regard is in the form of burnt material adhering to identifiable cremated bone fragments (therefore burnt along with the human remains), recovered from the pyre and subsequently deposited either in 'cremation burials' or in 'pyre related deposits'. McKinley (1989, 71; 1994a) has pointed out that it may be possible to identify at least the material and perhaps even the type of 'pyre goods' melted to particular bones; the location of this material on the body during cremation is inferred from the bones with which it has fused, suggesting personal and group identity signifiers in the funerary context, such as clothing, jewellery, or other dress accessories, that may have been 'worn' on the pyre in some cases. Moreover, we might categorise hobnails found as part of cremation deposits as perhaps reflecting the wearing or placement of footwear on the pyre in a similar way. Some of this material might have been introduced into the ritual sequence at a 'pre-pyre stage'. We might well think of discrete 'offerings' (such as animal, plant, or other items) on the pyre as 'pyre goods', but clothing etc 'worn' by the corpse, perhaps selected and displayed beforehand as part of some sort of 'laying out' ceremony, arguably fit also into a 'pre-pyre' category of ritual object (although we should be transparent about the fact that this is a matter of inference based on contextual and depositional association).

And yet the consumption of such items on the pyre along with the mortal remains *does* also represent another choice of action relating to the pyre. The same evidence therefore suggests both 'pre-pyre' and 'pyre' related ritual actions, as well as (perhaps) some articulation of the two phases; McKinley notes, in the case of traces of

glass beads and bronze brooches adhering to bones of the neck/chest and shoulders respectively at Spong Hill, that 'one would expect them to have been placed over during the laying out of the corpse' (1994a, 133), but does not seem to recognise the possibility that this action of adornment may have been carried out at a stage prior to moving of the remains to the 'pyre site', and the making of spatial arrangements on the 'pyre' or other cremation facility itself (see below).

From another perspective, the straightforward and more common identification of such objects as 'pyre goods' might lead us to reconsider such 'hard and fast' categorisations as to exactly which 'phase' of the ritual sequence certain objects 'belong'. It is important to separate the diagnostic categories of evidence from the original ritual sequences that they hope to investigate. Overall, it is worth remembering that concepts such as 'pre-pyre' and 'pyre' are themselves generated by archaeologists in order to make sense of the evidence; such categories may bear little relation to the phasing of ritual as perceived by the original actors. Actually, any number of objects, including those found unburned within the final deposit, or objects that we have absolutely no evidence of, may also have 'accompanied' the deceased at earlier or later stages of the ritual sequence.

The Pyre: evidence and inference[5]

Much important work has already been carried out comparing the results of archaeological experiments and ethnographic material, as well as literary, epigraphic and archaeological evidence, in an attempt to reconstruct Romano-British 'pyre technologies' (Wells 1960; McKinley 1989; 1994a; 1994b; 1994c; 1997; 2000, Pearce 1999; 2002). Several new points can be made, however, in relation to such syntheses of evidence and inference (see also Weekes 2005, 16–22).

'Technology'

The term 'pyre technology', while much used in this area and useful to a point, carries with it an implicit emphasis on the technical qualities of the 'pyre' itself, and seems to

[5] Much of the following arguments on 'technology' and '*busta*' have recently been published (Weekes 2005).

refer less to the work of human 'technicians'. 'Technology' in past research has perhaps been given an undue primacy over the work and experience of its human agents.

We might argue that the attempted reconstruction of a particular 'pyre technology' rather objectifies the 'process', with perhaps the tacit assumption that all people at all times would have used, thought of, and experienced a given technology in the same way. This universalist approach can have significant interpretive implications. For example, in an article by McKinley (1989) the writer, while admitting 'a certain amount of overlap' (*ibid*, 71), nonetheless approaches 'ritual and technology' as largely separate issues. McKinley's fieldwork methodology also adheres to this approach (1994b, Chapter 6; 1997, 65ff). Yet this *division of labour* certainly need not have existed in the minds and actions of original 'pyre technicians'.

Researchers interested in the archaeology of pyre technology are frequently faced with only scant and often indirect evidence, consisting of cremated bone deposits that have been removed from their 'original' context (the site of burning), sorted and/or cleaned, and redeposited in the 'grave'; unsorted bone and other pyre material in 'graves' or elsewhere (including any deposit of 'pyre debris') has generally only been collected (and therefore made available to the researcher) in more recent excavations, largely as a result of the pioneering work of McKinley (1989; 1994a; 1994b; 1994c; 1997; 2000a; see also Wells 1960) in this area.

Direct evidence, in the form of actual 'pyre sites', whether considered to be *Ustrina*, *Busta*, or 'one-off pyre sites' (see below, where the typical evidence used to infer such 'types' is discussed), make up a comparatively small proportion of the available evidence. Several main factors have contributed to this historic problem:

a) there have rarely been excavations of whole cemetery or mortuary areas,
b) there has, in the past, been little archaeological recognition of features associated with burning *in situ*, a situation much improved by the recent work of McKinley and others (see also Fitzpatrick 1997),
c) cremation seems mainly to have been carried out in a place separate from depositional sites.

Seeking a practical solution to the undoubted problem of direct evidence of pyre sites and of the 'technology' involved, researchers have therefore tended to have recourse to reconstruction techniques from a broadly scientific standpoint, either through observation or experiment (Wells 1960, McKinley 1989; 1994b). Arguably, one result of this is that the possible variables of human input into the work have been largely overlooked (see Weekes 2005).

Experiment and observation have variously shown the obstacles facing would-be cremators in producing, as near as possible, the perceived 'desired end result' of cremation, the latter being seen as the transformation of the human body so that 'fully cremated', burnt bone is made available for collection and/or deposition of whatever sort (we obviously should be careful not to project our own ideas of 'full cremation' or 'pyre efficiency' onto any criteria that may have been used by 'pyre technicians' themselves [see McKinley 1997, 66; 2000, 39]). The diagnostic qualities of such material have been scientifically determined (see below for more detailed analysis): in general, 'cremated bone' is characterised as significantly changed in crystalline structure, and is mainly white/off white in colour, showing signs of shrinkage, distortion and fragmentation (although, contrary to still popular belief, bone and other residues require further processing in order to produce the 'ashes' in powdered form, returned to relatives by agents of latter day crematoria, see below).

In order to re-examine the part played by human actors in the 'cremation process', it may be helpful first to note the approximate proportions of constituents of the 'average' human body, as clearly set out by McKinley (1994c, 339, citing various authorities):

> The process of cremation is one of dehydration, and oxidation of the organic components of the body. About 34.2% by weight of the human body is composed of organic substances, mostly fats and proteins, with water as the largest single component at 57.1% by weight. This leaves only 5.7% comprising the mineral content, the vast majority of which is within the skeletal framework. Seventy percent [sic] of the skeleton is formed by the mineral component–a calcium phosphate, hydroxyapatite...(T)he other 30% of the skeleton comprises the bone matrix, which is largely the protein collagen... (C)omplete cremation will result in full oxidation of the organic components of the body, and dehydration, leaving only the mineralized skeleton.

The most significant information here for our purposes is the fact that about 94% of the body as presented is made up of water and organic substances that must be removed in order to apply heat and oxygen to the bone. What is not made clear in this description of 'the process' is the fact that the skeleton, which must be exposed to sufficient heat and oxygen in order that *its own* organic and water components can be burned and driven off (before mineralisation can be achieved, if indeed that is the aim), is completely enveloped in material that will largely hinder such work. Ignition of body fats at around 500°C–800°C (McKinley 1989, 65; 1994b, 72; 74) would appear to be crucial for the successful destruction of the soft tissues and removal of water content of the body necessary before the majority of the bone can be fully processed (see below). Thus, if we consider the materials that need to be burned *as well as* their relative location within the body, we can instantly see some of the major problems inherent in any attempt to 'consume' the human body by fire. These are the problems faced by, and which therefore inform the work of 'pyre technicians'.

I would argue, therefore, that 'full' cremation of any part of the skeleton (from the scientific point of view of mineralisation, as definitions of the 'completeness' of cremation are of course relative) must of necessity be seen as comprising the accomplishment of two main goals (partly synchronic, but mainly diachronic). First the removal through burning of the organic and water components of the body is required so that sufficient oxygen and heat can be applied directly to the bone. Only then can the organic and water components of the bone be burnt off and driven out respectively, and (at least largely) uninhibited modification of crystalline structures be achieved. Whether one considers such actions as 'ritualised' or not (by the very nature of the material being burned I would incline towards the former definition), they would seem to detail the true 'work' faced by and undertaken by cremators. Such work surely requires specialised knowledge and skills.

The exact processes by which the human body is 'metamorphosed' in order to produce cremated bone remain a matter of some debate, and even confusion on particular points, among specialists.

Scientific experiments have tended to investigate the effect of heat on bone (i.e. what must be a later part of the 'the cremation process' as outlined above), and have, to an extent, elucidated the nature of transformation of human bone as a result of sufficient exposure to heat and oxygen. The X-ray diffraction work of Shipman *et al* (1984; cited and apparently accepted by both McKinley [1994b, 77] and Mays [2000, 207]) on the transformation of the crystalline structure of the mineral content of bone (hydroxyapatite) during heating, indicates an overall increase in the size of crystals in parallel with temperature increase; however, the critical temperature range has been found to be between 525°C and 645°C, where results have showed a 'fairly abrupt transition to a much more highly crystalline structure with a larger individual crystal size. Little further change occurs after 645°C…' (Mays 2000, 207).

We should note here with McKinley that '(E)uropean workers however, have reported both changes in the mineral form and a reduction, rather than an increase, in crystal size' (1994b, 77); actually, in an article published in the same year McKinley, now citing Lange *et al* (1987), appears to refute the proposed increase in crystal size altogether: '(A)s the bone is heated the –hydroxy bond in the apatite crystals breaks down, resulting in reduced crystal size' (1994c, 339).

Some variability in scientific results is also reported in relation to bone colour as a diagnostic feature of burning: examination of the degree and type of colour change in the material in line with increasing temperature. Mays records that, despite attempting to imitate exactly the experiment conditions used by Shipman *et al* (*ibid*), his results show quite different colouring in the mid-range temperatures, although the same overall results, the bone colour moving from reds, browns and blacks at lower temperatures, becoming lighter in the apparently significant 525°C–645°C range, and becoming white/off white thereafter (Mays 2000, 216–217, including table 11.1 detailing comparative results). Mays is at a loss to explain the causes of the discrepancies between the results of his and earlier experiments, but asserts that 'the very fact they exist shows that factors other than maximum temperature attained and duration of heating must exert some influence on bone colour' (*ibid*).

Whatever hidden variables may have caused such deviation in the results, perhaps the most important point to make here is that these experiments were carried out in

controlled conditions quite unlike any of the controlled conditions of mechanised crematoria or open wood pyres. The materials used were disarticulated de-fleshed goat bones heated in muffle furnaces (McKinley 1994b, 77; Mays 2000, 216–218), not fully fleshed, articulated (or clothed or covered for that matter) human bodies. The undoubted significance of these and other such factors for bone colour has been pointed out by McKinley from her observations of largely mechanised 'modern cremation', where she found that bone colour could 'vary considerably within one cremation': this as a result of variability of organic components different types of bone, and in *differing amounts of soft tissue surrounding the bone* (1989, 66; 1994b, 75; 77). Once again I would suggest that, in actual cremation contexts, the knowledge and skill of the 'pyre technician', who must control these more complex and difficult conditions in order to successfully burn and therefore modify the skeleton (see below), is a most significant factor, warranting deeper consideration.

In observing the more realistic circumstances of 'modern cremations' however, we are evidently dealing with a highly mechanised (recently further automated) and therefore more 'indirect' activity, obviously informed by modern western attitudes towards both death and the disposal of human remains (Parker-Pearson 1999, 41–42). The 'cremator operative' seems to be largely removed from his/her 'charge' (the corpse to be processed) physically, technically and psychologically (this would also apply to any scientific observers present). Thus it is perhaps not surprising that theoretical frameworks based on evidence from such sources have tended to treat the process as paramount, seeming to 'play down' the part of the operative. Before considering in more detail the vital role of the operative in the process, an outline of the effects of the process, again derived from the seminal work of Wells and of McKinley, is illuminating.

Wells' and McKinley's research has informed archaeologists about the gas-fired furnaces of mechanised crematoria in the early 1960s and early 1990s respectively, and many of their findings remain current (although see below for the latest advances in cremator automation). Furnaces tend to operate at 500°C–1050°C, the lower temperature being the minimum required for ignition of body fats; gas jets are only used until the fats are alight, after which the body continues to burn aided by the regulated provision of oxygen (McKinley 1989, 65; 1994b, 72). Indeed, some

cremations require only that the furnace is of sufficient temperature (approximately 800°C) when the coffin is placed within, and no gas firing at all (*ibid*). It takes between 10 and 20 minutes for the coffin to 'break open' (1994b, 74), and 'after about 45 minutes at 600°C–800°C most of the soft tissue has been removed, except for some of the thicker layers of fat and muscle e.g. around the buttocks, which may have fallen away from the body but would still be burning' (1989,65; see also Wells 1960, 34 and McKinley 1994b, 74; Wells took 900°C 'as an average', and today, higher temperatures in the 900s are almost uniformly reached earlier in the firing).

At this stage the skeleton is still connected by the ligaments, which are the last to burn, and can only do so when all other soft tissue has been removed (McKinley 1994b). Only after removal of surrounding soft tissue and ligaments can the bone be exposed to sufficient heat and oxygen in order for the cremation process to be 'completed'. 'Cremated bone' is seen as that which has been mineralised by heat after dehydration and combustion of its organic content. Dehydration of the bone (and the organic content of the bone being burned?) is the apparent cause of the shrinkage, distortion and fissuring characteristic of the material (McKinley 1989, 66; 1994b, 77–78; 1994c, 339; Mays 2000, 207).

My own crematorium observations (March 2004) have indicated that there have been some highly significant developments in cremation technology in the ten years or so since McKinley's published findings. As might be expected, the crematorium that I visited uses a now practically fully automated and computerised firing system, with built in responses to the variability of human 'charges' (see below), and three 'pre-settings' for 'light', 'standard' and 'heavy' cadavers.

Still, an overall 'process' of approximately 60–90 minutes duration can be described. However, the suggested 'homogeneity' of this outline in fact glosses over much diversity, both within and between firings.

As Wells and McKinley have each pointed out, there is a varied distribution of fats and soft tissues in each body, so some parts will burn more quickly (although not necessarily more effectively) than others (Wells 1960, 34; 35; McKinley 1989, 65; 66; 1994b, 72–75); in particular it would seem that the lower legs and skull will tend to

finish burning quicker than other parts as a direct result of there being less soft tissue to dehydrate and combust, although 'complete combustion of the brain may prove somewhat problematic' (McKinley 1994b, 75). In the latter case the *opening* of the skull vault is required for the brain to be fully combusted, a matter largely dependent, for McKinley, on the age at which 'charge' was deceased and consequent degrees of fusion of cranial sutures (*ibid*; or else, significantly, on human intervention in the process, see below).

In fact, 'state of the art' automated cremators now reflect a response to this problem; air jets appear to be automatically directed at the side of the head throughout the most of the firing. In the three cremations that I observed at this stage of the process (March 2004) a jet of air, apparently directed at the right sphenoid and temporal areas, meant that the skull was in each case sufficiently agitated for the brain to be exposed (or at least accessed) and combusted. In this way cranial sutures appeared to be opened as a result of internal pressure, as much as anything else. Interestingly however, each skull responded differently to this treatment, with one of the crania remaining intact far longer than the others, the brain matter in this case erupting from the disturbed temporal region.

Thus variability *between* different corpses is also a significant factor that the 'operator' or 'pyre technician', or automated cremator needs to be able to deal with. Because different bodies tend to vary in terms of the quantity, quality and location of the fat deposits required for cremation, general trends can be postulated: 'females will cremate more easily than males because of their slightly heavier and different fat deposits; the very old and the immature are more difficult to cremate as they usually carry less fat' (McKinley 1994b, 72; see also Wells 1960, 35); techniques to respond to and overcome such variables are therefore required of the cremator, whatever technology is being used.

Fascinatingly, it would seem that no completely predictive model for how particular bodies burn can yet be established. For instance, McKinley records one 'unexplained' case, 'charge 5a', 'which was, in size, age and sex, equivalent to charge '5b' but, for some unknown reason, proved very difficult to cremate. Whereas '5b' needed no gas heat [i.e. furnace temperature was sufficient that 'firing' was unnecessary, see above],

'5a had continuous heating throughout the process but still proved most difficult' (McKinley 1994b, 74; 72–74). Even in the latter day automated cremators, a manual override is available and still necessary on occasion. For instance, I am informed that the cremation a particular 'charge' weighing more than '35 stone' required intervention on the part of the operator (Daren Caldicott, *pers. comm.*) who extended the duration of this firing to nearly three hours, applying a lower and more steady heat.

It is surely in dealing with such variability that the specialised skill of the 'operator' or the 'pyre technician' is so important. But in what way, specifically, must he or she 'get involved' in the 'process' (or indeed control it) in order to react to, and therefore overcome, the problems presented by the varied nature of the human body? The answer to this question may lie in a further paradox of the human body and therefore the cremation 'process', arguably not clearly solved by Wells, McKinley or others (see Anderson 1998, 120–121, for example). This important ambiguity is inherent in the fact that while certain parts of the body will have more fat which aid combustion and dehydration, these same parts are also likely to have more soft tissue in general, which will *impede combustion of the bone*: '(I)f oxygen reaching the bone is impeded by the presence of soft tissue, the bone will not burn' (McKinley 1994b, 75). Moreover, some bones, having a higher organic content, will intrinsically take longer to burn than others (*ibid*).

The 'operator' or 'pyre technician' (or cremator designer) must know how to strike and maintain a *balance* between utilising the heat generated by fat ignition in order to remove water and combust non-fatty soft tissue, and concurrent and/or consecutive exposure of the bone to sufficient oxygen as well as heat. Cremator operators and designers, and pyre technicians, need to control conditions through actively modifying temperature and particular application of the heat source *and through deliberate manipulation of the human remains*.

As has been stated, the role of the operative in largely mechanised (and indeed recently automated) cremation would seem to be as a result relatively reduced, but this role should nonetheless be considered much more than merely a 'further variable' (McKinley 1994, 74). In the 1990s, operators not only controlled furnace

temperatures, but also airflow around the chamber, to ensure that heat was applied to all parts of the body (especially where it was needed most at any given point in the cremation?), and were on hand to '*provide turbulence to aid the breakdown of remains*' (*ibid*, 72, my italics). This albeit indirect intervention (i.e. using air jets as a tool), manipulating those parts of the body that require more than just heat, was surely an important part of the work at that time; in fact McKinley stated that the 'skill of the operator, using the various air flows, will ensure complete combustion' (*ibid*). In the automated cremators now in use, control of airflow has largely passed to the computer settings and built in functions, although, as has been stated, manual override is still an option (Daren Caldicott, *pers. comm.*).

Further processing by the operator (as described by McKinley and still relevant today) involves the raking down of remains to a

> 'middle hearth, during which process the hot, brittle bone breaks along fractures developed in cremation. On the middle hearth, they are subject to further heat and turbulence from reverse flow air…and, if necessary, the after burners, which aid completion of bone oxidation, and break down and remove any remaining wood ash from the coffin. The operator may then pull the remains forward into an 'ash residue' compartment, in which they may cool and be removed. This movement obviously results in additional breakage' (*ibid*, 75).

The foregoing is less than explicit about the fact that all the acts described have to be controlled by the operator. It is clear that the operator is responsible for further processing of the remains, chiefly through *agitation* ('raking down' also results in destruction of the skull vault [*ibid*, 74], see above). It is this agitation that causes the bone to fragment along fissures produced through dehydration: '(T)he bone is rendered brittle, especially whilst hot, *when any movement will result in increased fragmentation along the dehydration fissures'* (McKinley 1994c, 339, my italics).

In a final consideration of the human element of mechanised and automated cremation, we might note some critical observations (still relevant) by McKinley of the role of the operator in further sorting of the remains in order to remove

> '… any extraneous material, e.g. coffin pins, prior to passing the bone through the cremulator [machine that renders bone to granular state] … (T)he amount of movement which may take place

during this sorting varies greatly depending on the working practices of the operative. The maximum fragment size noted by the writer at a modern crematorium was *c.* 250mm, a figure much reduced by varying the amount of raking/movement of the remains...' (*ibid.*).

Manipulation/agitation of the human remains, then, formerly the province of the cremator operative throughout the process, but latterly only in the raking down and sorting stages, *is chiefly responsible for fragmentation of the burnt bone*.

Also, the 'modern' sorting and collection of coffin nails etc from the material, last in the cremation process before pulverisation of remains in the 'Cremulator' (I am informed that before mechanisation of the process, this work was also manual, using a brick; Daren Caldicott, *pers. comm.*), seems to represent an interesting inversion of the actions of pyre technicians, who instead need to extract the cremated human bone itself from pyre residues, or 'abandon' all material once cremation is complete, either through mass deposition of pyre debris elsewhere, or covering over in situ.

McKinley has suggested methods of separating and sorting cremated bone from other pyre debris, in the shape of flotation and winnowing techniques (1989, 73); however, that sorting of water-cooled pyre materials after burning is a relatively simple and effective method is evidenced by ethnographic reports (see below). It is not hard to imagine that any such activity would result in further fragmentation of the bone.

The degree of manipulation/agitation of the human remains that 'pyre technicians' deploy *during the cremation* (in using their own forms of technology), however, requires further investigation.

A 'common sense' reconstruction of the difficulties attendant on pyre cremation shows (not unexpectedly) the requirement for a greater degree of involvement on the part of the pyre technician in the firing process, if the work is to be successful. The open pyre obviously demands a manual control of conditions (and, as a result, a more intimate experience of cremation?), requiring manipulation and agitation of both fuel *and human remains*.

McKinley reports an apparent uniformity of pyre construction techniques in different contexts, and a general model, involving open, rectangular lattice like wood structures with a shallow flue beneath to aid ventilation can be suggested (1994b, 79; although actually princely and Brahmin Indian pyres, as well as certain Australian examples cited by McKinley do seem to show some quite significant variation). Nevertheless, the particular difficulties of pyre cremations are especially inherent in the need to use solid fuel (wood, in the main), while at the same time maintaining a clear flow of the oxygen required for combustion, in addition to dealing with the problems inherent in the human body outlined above.

Thus coverage of the human remains, either with 'pyre goods' or as a result of the need to add more fuel during cremation, will decrease air flow and increase the level of difficulty; moreover, build up of fuel ash, premature collapse of the pyre structure, parts of the body falling to less accessible areas of the pyre and being covered by debris, considerable variability of temperature in different areas of the pyre (with the centre more likely to have higher temperatures than the periphery), and even variation in the weather at the time of cremation (an open firing may take seven or eight hours), affecting degrees of draught available (as well as possible inhibitors, such as heavy rain), have all to be taken into account (McKinley 1989, 66–67; 1994b, 78–79).

Bearing in mind such a long list of possible variables, the necessary human element of pyre cremation is thus indicated as 'tending' of the pyre; 'tending' or maintenance of the pyre can simply be defined as the pyre technician's specialist response to the inherent difficulties of open pyre cremation. Thus the work will of necessity involve not only correct timing and placement of additional fuel, but also intervening in order to 'stir up the pyre occasionally, to allow oxygenation and to return any rogue bone or wood, which would result in considerable movement of the bone'; in open pyre cremations in the past, then, 'much fragmentation would have taken place on the pyre (McKinley 1989, 72), with bone being broken

> 'as the pyre collapsed in the later stages of the cremation or if the pyre was tended to any degree, e.g. reinstating bones which had fallen out of the main body of the pyre, or slight stirring late in the process to re-oxygenate the pyre' (McKinley 1994c, 340).

We might argue however that the above description, by using such careful language, once again rather underplays the degree of human activity in the process; even the word most often used for pyre maintenance activity, 'tending', is loaded with technical and cultural overtones, suggesting a largely supervisory role, a 'careful' mode of action. Perhaps as a result of such attitudes there would seem to be some degree of (culture specific?) hesitation on the part of researchers as to exactly what form such 'tending' might take, or what degree of 'tending' might be considered acceptable in any given cremation context.

For although considerable and vigorous manual agitation of the pyre, in order to maintain the required relationships between fuel, heat, oxygen and human remains, would seem to be an obvious explanation for much of the fragmentation that characterises archaeological cremated bone deposits, experts have historically avoided giving such activity prominence in 'the cremation process'.

It is important to note with McKinley that with archaeological deposits of cremated bone 'fragment sizes presented in the reports should be regarded as *post-excavation* fragment sizes' (1994c, 339), i.e. that we need to remember the effects not only of the 'pyre technology' (*ibid,* 340), but also of 'burial, excavation and post-excavation treatment' (*ibid,* 342; we should also add disturbance of the deposit and any other post-depositional processes to this list). And yet the examples of apparently largely undisturbed cremated bone deposits cited in support of this argument are surely still fragmented to a degree sufficient to pose questions of the original cremation and/or collection process; for example, does not a 'majority' of fragments being over 30mm, and a maximum of 140mm (*ibid*, 342) still argue for rather profound fragmentation of the skeleton during the original process (*ibid*, see figures 3 and 4)?

A culture specific approach to the definition of 'tending' may well have informed experimental archaeology in this area. McKinley for example, occasionally citing her own research firing experimental *busta*, reports no clear details as to the types and levels of 'tending' deployed, or the degrees of fragmentation of bone recovered (McKinley 1997, 65–67; 2000a, 40). It is interesting to note that McKinley reports 'large quantities of charred soft tissues – noticeably lung, intestine, bowel and spinal longitudinal ligament – in experimental pyre cremations, remaining on the ash bed of

the pyre up to eight to nine hours after cremation had commenced…' and that '(E)ven in next day recovery of material, some charred tissues may remain, particularly ligament' (2000b, 269): all of which strongly suggests that the body on the experimental pyre in question was not rigorously 'tended' to any degree but largely left to burn.

Gaitzsch and Werner, even though they express surprise that bones from archaeological *busta* show such a high degree of fragmentation (1993, 59–60), mention nothing about the degree of fragmentation of pig bones in their own experimental pyre; moreover, no reference is made to 'tending', other than the need to place more fuel around the more fleshy parts of the pig (*ibid*, 66). Arguably, an easier way of dealing with the problem that such areas of the body pose would have been more vigorous 'tending' or 'stoking' in order to separate the soft tissues from the bone and allow the application and circulation of oxygen and heat.

The expectation of a broadly 'laissez faire' attitude to the pyre seems also to have had implications for the use of ethnographic analogy in cremation studies. Once again McKinley is the authority, concluding that, while 'pyres may have been tended…there is no indication of additional fuel being added once the cremation is underway', and that '(D)eliberate fragmentation of the bone is only documented in some of the Aboriginal cases' (McKinley 1994b, 81).

We need however to be more critical of the sources from which such general inferences are drawn. The apparent omission of either the need to add extra fuel (or the act of doing it) from the literary, historical or ethnographic sources, for example, *is only evidence of its omission from the sources*, for which there may be many reasons: a writer may not have observed the entire cremation, or may have taken the addition of further fuel for granted or thought it insignificant, or found it distasteful, or may have gathered the information from another source. Arguably, only 'pyre technicians' might have the knowledge and skill required for the work, and therefore only they are fully qualified to provide detailed description of what 'needs to be done'; yet we have no first hand accounts from 'pyre technicians' themselves.

Moreover, McKinley's assertion that 'deliberate fragmentation of the bone is only documented in some of the Aboriginal cases' (*ibid*) is apparently derived purely from an account given by the nineteenth- century traveller G.A. Robinson referring to the practice of first leaving the body to burn on a pyre without tending. Yet Robinson seems simply to state that:

> 'If a corpse was not destroyed by the initial firing the remains were raked into a heap and refired... or bashed so that they were more easily consumed by the pyre' (quoted McKinley 1994b, 80).

Untended pyre cremations are highly unlikely to produce completely mineralised bone; Robinson does not appear to be describing particular or 'rare' cases per se, but rather a pattern of human intervention in the firing in order to be sure of its 'completion'. Actually, in more detailed descriptions of Tasmanian cremation, Robinson shows himself to be far from squeamish:

> ' ... (T)hey continued to apply fuel to the pile. The body was now seen on the pile, when one of the men, HEEDEEK, got a long pole and broke the head. The brains was in a perfect state, but the skull and flesh was burnt. Others of the men got long poles and poked the body until the whole was consumed to ashes ...' (Robinson, 31 July 1832 [ed. Plomley 1966, 637–638]).

We should note the way in which the particular difficulty of the cranium was overcome in this instance. The cranial fragments frequently analysed for possible indicators of sex or age in archaeological cremation deposits might also be diagnostic of such intrusive acts of cremation in the past. In fact, Wells long ago noted that the type of fracturing of '... the medial part of the petrous temporal bones...' in cremation deposits that he had analysed '...does not seem to occur under modern conditions of cremation...' (Wells 1960, 33; see Weekes forthcoming).

Significant new ethnographic comparison is now afforded by detailed accounts of Hindu pyre cremations from India and Bali. Robinson's account of 'bashing' of the remains now has more weight. Consider, for example, this description of 'tending' in Banaras on the Ganges in Northern India:

> 'Mid-way through the cremation, the chief mourner performs *kapal kriya,* 'the rite of the skull', by cracking open the cranium of the deceased with a bamboo pole...[this would actually seem also to

> have a practical purpose with older corpses, where cranial sutures are likely to be more fully fused, see above]. Often *kapal kriya* in fact consists of a general breaking up of the partly incinerated corpse, and a stoking of the fire so that it is more completely consumed' (Parry 1994, 177).

Such evidence can be further corroborated. I am informed for example that a particular group of chandala ('untouchable') pyre technicians, *Dalits* in the Southern Indian states of Tamil Nadu and bordering areas of Andhrapradesh, are locally called *Kattiyakarans*, meaning 'men with sticks', because of the way in which they actively stoke the pyres, 'bashing' corpses, maintaining the correct position of corpses within pyre structures, etc. (R. Peniel Jesudason Rufus *pers. comm.*).

Finally, a Balinese example of latter day 'pyre technicians' in action is clearly recorded by Jane Downes:

> 'one or two men assisted the body to burn more quickly by poking it with long sticks and lifting it up to help the air circulate. The manipulation and fragmentation of the body during burning also serves to aid the spirit to escape the body. When the flesh had burnt off and the bones had been reduced through agitation to fairly small fragments, the pyre was quickly quenched with water brought up in large buckets by the women... the bone fragments were rapidly picked out of the ashes by the women...' (Downes 1999, 23).

It would be hard to find an account that more clearly shows how significant the human action of 'tending' can be for the process of cremation (as well as informing ideas about the metaphysical results of the process); the diagnostic qualities of archaeological cremated bone deposits, even if the vicissitudes of deposition, post-deposition, excavation and post-excavation are taken into account (McKinley 1994c), frequently seem to indicate that just such actions were carried out by the modern pyre technician's ancient counterparts.

The quenching of the Balinese pyre, and rapidity with which bone fragments were reportedly picked out of the ashes is also worthy of note; in the same way that small 'unwanted' objects such as coffin pins can be manually removed from bone residues in mechanised crematoria using a hand held magnet which causes further fragmentation of the bone, so it would seem that (at least the well burned/oxidised/white?) bone fragments are readily identifiable and retrievable from

the quenched pyre residues in this example. Presumably, this might also apply to the selection of recognisable pyre goods.

Before moving onto a consideration of evidence of pyre practice in antiquity, a final note should be made of the much higher degree of 'intimacy' inherent in the tactile experience of pyre cremation than we might see in the use of more mechanised and/or automated technologies. In the latter situation, for example, '(D)iscretion requires that modern cremation incinerates efficiently, without the production of smoke' (McKinley 1994b, 72). On the open pyre, smoke, and with it the smell of burning flesh, is an obvious function of the nature of the technology and its use; thus adding perfumed oils to a pyre in India not only serves 'to aid the initial combustion' (*ibid*, 78), but also serves to disguise the smell (as do the addition of other spices, the use of sandalwood etc, see Parry 1994).

Further aspects of the experience of pyre cremations would seem to suggest the requirement of a special attitude on the part of pyre technicians to the burning of human remains, perhaps very different from that which a 'modern western' observer might assume. Quite apart from the action of stoking the pyre, the perceived results of the work on the human remains must be a significant factor.

Some flexing of the limbs is to be expected early in the firing as dehydration affects tendons and muscles (McKinley 1994b, 74; Mays 2000, 207). Then, as Mays points out, there will sometimes be a swelling of the abdomen resulting from the expansion of gases (Mays 2000, 207). This seems to be something like the effect reported by Gaitzsch and Werner, who noted that the pig carcass they used on their experimental pyre ruptured after about fifteen minutes, and the innards became visible (Gaitzsch and Werner 1993, 64). Mays goes on to point out that the skin and muscles of the corpse split (a contraction of skin and muscles through dehydration, perhaps combining with gaseous expansion?), gradually revealing soft tissue and part of the skeleton (Mays 2000, 207). Arguably, this part of the cremation is where the action of actively stoking the pyre and agitation of the remains is of paramount importance. McKinley's report of viewing un-burnt internal organs and ligaments in her apparently lightly tended experimental pyre is again of relevance (2000b, 269). Finally, my own observations (March 2004) of intact brains rolling from 'opened'

crania, and of brain matter erupting from the side of the head during automated cremation might be invoked, although, as we have heard, pyre technicians might have recourse to more 'involved' methods for 'dealing with' brains.

Above all then, pyre cremation should be seen as a human, physical and conceptual effort as well as technical; the specialised knowledge, skill and experience of 'pyre technicians' should not be underestimated.

'Busta', 'one-off pyre sites', 'ustrina' and 'pyre goods'

Recent work has developed new terminology for the 'types' of pyre in the Roman period (obviously relating to specific 'types' of ritual) that might be encountered in the archaeological record, in the shape of '*busta*', 'one-off' pyre sites and '*ustrina*' (Struck 1993; McKinley 2000a; Polfer 2000; Pearce 1999), as well as for the provision of items for consumption with the human remains on the pyre: 'primary gifts' (Pearce 2002, 374, reviewing European reports) or 'pyre goods' (McKinley 1994a). In all these areas, however, some questions need to be asked of the relationships between evidence and inference commonly used to produce such categories (see Weekes 2005, 22–26).

Identification of *busta* and *ustrina* in the archaeological record often seem to be based on a frequently invoked passage from the Latin writer Festus (though not always quoted/translated either fully or accurately, see Polfer 2000, 30; McKinley 2000a, 38). It has been argued that Festus seems to draw a significant distinction between two general terms referring to types of pyre facility:

> **Bustum** proprie dicitur locus, in quo mortuus est combustus et sepultus, diciturque bustum, quasi bene ustum; ubi vero combustus quis tantummodo, alibi vero est sepultus, is locus ab urendo ustrina vocatur; sed modo busta sepulcra appelamus (Pauli ex lib. Pomp. Festi, *De Verborum Significatu*; Lindsay 1965, 29),

Which can be translated as:

> (A) **Bustum** is properly called a place in which a dead person is burned and buried, and it is called bustum, as being 'well burnt'; where however someone is indeed burned, but is truly buried elsewhere, that place is called the ustrina from the act of burning; but we only call *busta sepulcra.*

The exact link between this statement and current archaeological theory relating to *busta* (formulated by Struck 1993), and *ustrina* (delineated by Polfer 2000; further explored in detail by Pearce 1999, 48–51) however, is actually somewhat unclear.

The prevailing assumption about the *bustum* is perhaps exemplified by the following explanation from McKinley: 'the inferred technique in this instance being to let the pyre burn down into the pit then bury the remains *in situ*, i.e. the feature represented both pyre site and the grave. This type appears to be that defined by Festus…' (McKinley 2000a, 39).

But is this really what the Festus excerpt means? Leaving issues of provenance for these ideas to one side, Festus' perhaps rather too 'aetiological' derivation of *'bustum'* being from 'bene ustum' may give some cause for concern (Tucker [1931, 38] and the Oxford Latin Dictionary [1968, 245] give different etymologies, neither of which agree with Festus). More significantly, however, what does the writer mean by '*locus*'? This word may indeed mean 'exact same spot', but could also, and perhaps more sensibly, refer to a more general 'place' in which burning and burial constitute separate and sequential acts (a 'mortuary area' designated for both the burning of pyres *as well as* subsequent deposition of cremated bone?). Moreover, a further fragment of Festus seems to link '*bustum*' more closely with a place of burial, or sepulchre, with no mention of burning (*ibid*, 456). To infer the ritual specialism of letting the pyre burn down into a pit and burying the remains *in situ* from the Festus excerpt is unwarranted.

In the wider literary context, an examination of the sources by Pearce has shown that 'Festus' distinction seems artificial in comparison to attested literary usage…'; Pearce has found that pyres are most often referred to in the literature as a *rogus*, or *pyra*, or *ignis*, and even *ara* (Pearce 1999, 48; 'ara' is particularly interesting in comparison with some Hindu concepts of the pyre as 'the last sacrifice', see Parry 1999, Chapter 5). Moreover, Pearce could find no reference 'where *bustum* in a literary source

actually refers to in-situ cremation and burial', the word tending to denote 'the tomb or ensemble of tomb and monument' (Pearce 1999, 49; 48–49).

Several further observations by Pearce on alternative distinctions of *busta* and *ustrina* in the epigraphic record are also worth noting: that *(B)ustum* more often refers to the tomb than the pyre…', for example, that '…(S)ome inscriptions explicitly contrast the *rogus* as pyre…' and that '…(A)n epitaph from Rome (CIL VI 10237) contrasts *ustrina* and *bustum* as pyre and tomb'(*ibid*). Do these last points perhaps throw new light on the final part of the Festus quote, that *modo busta sepulcra appelamus*: 'we only call *busta sepulcra*'?

From another perspective, uncritical application of *bustum* to mean '*in situ* burning down into an under pyre pit' in the archaeological record carries with it exactly the same interpretive dangers as using other Latin terms in the same way. Past experience should provide sufficient warning about the evidential weakness of uncritical application of Latin terminology in archaeological contexts (think of *villa*, for example, see Reece 1988, 80); such words are loaded with complexes of meaning that may well be alien in, and a false projection onto archaeological contexts.

As a consequence, the term '*busta*' , whether relating to 'Grubenbusta' (Struck 1993, 82–83; McKinley 2000a, 39–40; the main type, broadly defined as a feature resulting from 'allowing' the burning down of the pyre into an under pyre pit and covering over) or 'Flächenbusta' (Stuck 1993, 83–84; McKinley 2000a, 40; another 'type' resulting from the simple heaping of a mound over the remains of the pyre on the ground surface) should be considered an *archaeological concept*, rather than anything necessarily reflecting terminology, 'typology' or category in the thoughts and actions of original pyre technicians or 'mourners'.

By way of example, might we not consider at first glance the Homeric description of heaping up of a barrow over the pyre of Patroclos to depict some sort of Flächenbustum (*Iliad, xxxiii, 255–7*)? Yet immediately prior to this and apparently as part of the same ritual sequence, attendants had already gathered the 'white bones', for placement in a golden urn (*ibid, 252–3*). Whether or not we treat the Homeric text as an 'accurate account' (although remarkably careful observance of ritual sequence

and detail is to be found elsewhere in Homer) the important point here is that the actions of barrow building over the pyre site and collection of some of the bone for alternative deposition are allowed to exist side by side in the text. (Incidentally, is the 'white' of the bones here merely an idiomatic adjective used like an epithet, or is it also a technical term for bone which is more fully oxidised, and therefore recognisable as ritually 'suitable' bone for collection, see above).

Of course, the raising of a mound over a pyre site (or, for that matter, the covering over of a pit full of pyre debris) is not exclusive of first gathering at least some of the human remains (and any identifiable 'pyre goods'?) for separate deposition. Non-removal of cremated human remains after burning is surely a definitive element of the '*bustum*' concept. Archaeological evidence for a '*bustum*' of either sort therefore would necessarily require, *in situ*, the practically complete cremated remains and pyre debris from one cremation either in an under-pyre pit or on a buried ground surface.

We might argue that, without any real evidence for non- removal of human bone from putative '*busta*' (i.e. not even a 'token' amount) prior to back filling or mound building, the whole '*bustum*' concept becomes redundant as an archaeological tool. The idea of a complete lack of removal from the '*bustum*' of at least some bone for deposition elsewhere is in fact entirely based on inference (informed by Festus?); this inference is certainly not convincingly supported by the archaeological data to any degree.

A decided lack of sufficient cremated human bone in several '*bustum*'–like features from St Stephens, St Albans has suggested that an alternative interpretation of them must be sought, leading both McKinley and Pearce to consider the possibility of these features being 'one-off' pyre sites (see Pearce 1999, 48; McKinley 2000a, 40). And yet it has to be said that '*busta*' not infrequently are found to contain far less burnt human bone than we might expect from an adult cremation where all the remains have been 'left' *in situ*.

The weight of cremated human bone that we might expect from an undisturbed '*bustum*' burial (i.e. where all the remains as well as pyre debris had simply been covered over *in situ*) of an adult, according to McKinley's more recent estimate, is

between 1000g and 2400g 'with an average of *c* 1650g' (McKinley 2000b, 269; although weights up to 3600g have apparently also been recorded). This accords quite well with Mays' citation of figures from Malinowski and Porawski (1969) who 'give average figures of 2004g and 1540g for weights of male and female adult corpses' (Mays 2000, 220), and from Trotter and Hixon (1974), who give an average again in grams of '1919 (males 2,288 [range 1,534–3,605], females 1,550 [range 952–2,278]' and lower figures for children (*ibid*, Table 11.2).

But it would seem that convincingly large deposits are not the norm in these contexts. As Pearce points out: 'the expected amount has rarely been recovered in the few *busta* from which the human bone has been analysed and is often lower than in other types of cremation burial…'(*ibid*, 43). Mckinley successfully questions many of the recorded features designated '*busta*' on just these grounds (2000, 40). Of course, it should be noted that factors such as post-depositional processes, excavation technique and methods of post-excavation and reporting have all to be taken into account (Pearce 1999, 43; a point comparable with that of McKinley concerning degrees of bone fragmentation [1994c]); given the nature of pyre cremation, it may also be suggested that insufficiently burnt bone in these contexts has decomposed while the mineralised bone has not.

Even so, without any firm evidence of a total lack of bone collection from these features prior to filling in or covering over, the question remains: do '*busta*' (in the sense commonly meant by archaeologists) actually exist? Or are all these features simply various examples of pyre sites, with or without under pyre pits for ventilation purposes (and debris collection?), that have been 'closed' by being covered over after the 'right' sort and/or amount of cremated human bone has been collected in each case? It would indeed seem wise to retreat to Pearce's conclusion that

> '(T)he archaeological remnant of Roman period pyre sites comprises mostly the pits over which the pyre would have been constructed to provide for ventilation and, if the pyre site was used only once, as a repository for pyre debris' (Pearce 1999, 51).

An interesting category of *archaeological* evidence for a given context representing *in situ* burning and 'grave' at the same time, might be the deliberate and apparently

careful deposition of un-burnt 'accessory' items, such as ceramic vessels, sometimes encountered in such features. Even so, should such objects simply be interpreted as 'grave goods', demarcating the pyre site as also 'burial' site? With a more open-minded approach, special deposits of this kind might indeed reflect either 'pyre side' or 'pyre closing' rituals, for example (see below).

If the perceived polarity of '*bustum*' and '*ustrinum*' is purely an archaeological construct, what do archaeologists mean by '*ustrinum*', and how does *this* definition compare with the thoughts and actions of cremators in antiquity? If Festus is taken at face value, the assertion seems simply to be that '*ustrinum*' is a technically specific reference to a place of burning (or pyre site?), where no subsequent deposition of remains takes place:

> 'ubi vero combustus quis tantummodo, alibi vero est sepultus, is locus ab urendo ustrina vocatur'
>
> 'where however someone is indeed burned, but is truly buried elsewhere, that place is called the ustrina from the act of burning' (*ibid*).

This somewhat vague delineation of place accords reasonably well with Polfer's initial definition of '*ustrina*' as 'cremation areas, either individual or collective' and is also sufficiently unspecific as to be commensurate with current knowledge (Polfer 2000, 30). Polfer goes on however to argue for stricter categories of feature in much more technical detail, distinguishing 'permanent *ustrina* built in durable materials' and 'non-permanent areas used for a single or several cremations' (*ibid*, 31). A scatter of possible examples of the 'permanent' type of feature are known, generally from 'urban cemeteries' and 'constructed in tiles or in dry stone walling and...quadrangular or circular (often doubled and concentric)' (*ibid.*).

Polfer describes the 'non permanent' type of *ustrinum* as being more obviously associated with 'smaller rural cemeteries' and '(E)stablished on the ground itself...they consist of simple depressions of shallow depth, filled with the remains of pyre debris...' (*ibid*). Such features can be further sub-divided into small areas of two or three square metres 'used only for one or a very limited number of cremations' or 'cremation areas which are much larger... (T)hese areas, which were in for use [sic]

up to 150 years, were formed in the course of time by the overlapping of a considerable number of individual pyres' (*ibid*).

Unfortunately no detailed evidence for such 'overlapping' (i.e. *in situ* burning upon *in situ* burning) is given in the case study of Septfontaines, Luxembourg supplied by Polfer in the article in question, nor is any reference made to any amount of 'residual' cremated human bone, of which we would surely expect such a feature to contain a considerable amount (consider the results of probable pyre techniques outlined above). There is obviously a distinction to be made between 'pyre debris', which of course may be redeposited, and 'pyre site' which requires evidence of burning *in situ*. The fact that '(M)ost of the material discovered in the *ustrinum* consisted of pottery sherds' (*ibid*, 34), without mention of the more diagnostic evidence, is not in itself eloquent of a multiple pyre site of any sort.

It would seem that confident definitions of such archaeological features as '*ustrina*', (projections of literary and epigraphic evidence) are once again more a function of the felt need for an archaeological terminology and categorisation of evidence, than a true understanding of how such places were originally defined, or indeed how they were used.

Pearce seems to come to a more realistic conclusion of what we know so far about '*ustrina*':

'(O)f the epigraphically attested *ustrina* we know little. Their dimensions are likely to relate more to the sizes of plot on which they were established. We remain ignorant of whether they were platforms on which the temporary structure of the pyre was erected, with or without aids to ventilation, and whether the term also applied generally to areas that were given over to the purpose of cremation rather than for the establishment of tombs' (Pearce 1999, 51).

Finally, recent scholarship has raised awareness of the pyre stage of the cremation ritual and the objects that seem to have been significant at that stage, 'pyre goods' (Mckinley 1994a, 1994b, etc), and little need be added here on this subject. In deconstructing uncritical connections between evidence and inference, however, we might reiterate the need to be careful about simply linking any apparently burnt

material found within or in some sort of association with a mortuary area, to either a specific pyre, or to 'pyre side ritual' in general (whether these burnt materials be eventually considered 'pyre goods', 'pyre offerings', 'pyre debris' or '*Aschengruben*', see below).

In terms of burnt material (other than cremated human bone) found actually within the apparent 'burial' context of a specific individual (the deceased apparently represented in that burial context), it should be remembered that communal pyre sites may have led to 'residuality' and accidental mixing of bone, and therefore of 'pre-pyre' or 'pyre goods' etc (McKinley [1989, 69] and Pearce [1998, 103] draw attention to this factor). Collection and deliberate or accidental deposition of such items would seem to depend both on non-practical considerations relating to the exercising of choice on the part of the collectors, as well as practical components; recognition of particular parts/objects and ease of access to them after cremation, for example, need to be accounted for, and whether or not re-used pyre sites were in each case fully cleared of uncollected material after each 'firing'. On top of this we need to accept the fact that post-depositional processes are very likely to have had an impact on such fragile evidence, with serious implications in terms of the contamination of particular cremation deposits (McKinley 1989, 69).

The interpretation of any burnt material found not to be in direct association with cremated human bone (e.g. *Aschengruben*: Wigg 1993), but simply within a general 'area' where cremated bone has been found, as being in someway 'pyre related' is another inference, and evidentially weak, as such material may have been burned anywhere and in total isolation from any pyre. Even if cremated human bone *is* present within such a context, we cannot be certain that items were not burned separately, and only subsequently mixed prior to or during deposition.

3. Deposition

Inference of deposition relating to cremation rituals relies heavily on spatial association of deposits with burnt human bone, either in direct association within the same specific archaeological context, perhaps representing a single depositional event, or within the same general archaeological context, or 'mortuary area', representing ongoing and/or separate depositional events. Beyond this abstract level of inference, however, lies a remarkably diverse field of depositional possibilities; not surprisingly, archaeologists have tended to respond with a 'typology', (although arguably neither a universally agreed, nor often explicitly stated 'typology'). As a result, associated terminology can be seen as often over particular, and somewhat deterministic. I propose the following scheme of five general types of Romano-British cremation related context (with respective sub-types) in order to articulate and clarify archaeological definitions of cremation related deposits.

1) Pyre sites

A reasonably secure interpretation of an archaeological feature as probably falling within a general 'pyre site' category (i.e. a category hopefully largely devoid of pre-determined definitions; see forgoing analysis of pyre types) would seem to require a combination of three types of evidence: localised burning, 'pyre debris' in the form of fuel ash/residues and/or charcoal, and at least some 'residual' cremated human bone. These components should be present (although, as McKinley has noted, some scorching of the sides of cut features, or of other deposits therein, may occur as a result of the deposition of very hot pyre debris [1989, 73]).

Other objects might also be present in layered deposits along with fuel debris and burnt human remains (Gaitzsch and Werner 1993, McKinley 1997), including charred seeds (either from kindling, pyre offerings or resulting from the 'background environment' of the pyre; Kreuz 2000), burnt animal bone (Gejvall 1963), or the remnant of other objects apparently burned on the pyre (McKinley 1989, 71; 1994a, 133), although we should note that it is not impossible that such items have been burned separately and added to the pyre context.

Evidence of further structural components, such as an under-pyre pit, post settings, or an over pyre mound, might also add to the picture (Struck 1993; McKinley 1994b, 80; 1997, 65; 2000,39; Pearce 1999, 41); more permanent developments of sub-structure and super-structure have also been recorded, ranging from relatively simple installations of possible 'hard standing' platforms, or parallel walls between which the pyre might be more easily constructed, to the apparently more sophisticated concentric examples already noted in the above analysis of the '*ustrinum*' concept (Pearce 1999, 40–41; Polfer 2000, 31).

Even if the possibility of mass 'clearance' of pyre debris is taken into account (McKinley 2000, 39), without the grouped and corroborative evidence of *in situ* burning, burnt human bone and fuel ash residues, the interpretation of any of the latter classes of evidence (burnt objects, or structural elements) as indication of the presence of a pyre is relatively insecure. Indeed, the presence of 'pyre debris', burnt human bone, or even *in situ* burning in isolation cannot be taken to indicate a 'pyre site'; I would suggest that if we are to infer a pyre site with any degree of confidence these three types of evidence must be found in direct association with each other. Of course, the nature of pyre construction (on the ground surface), possible clearing activities, and more importantly post-depositional and excavation processes have tended to make the survival of such dynamic evidence scarce (McKinley 2000, 39).

Some clues as to pyre construction and bone collection techniques might be derived from cremated bone deposits from other contexts such as cremation burials themselves. Mixing of different human remains within the same cremation deposits might suggest collection *en masse* from a communal pyre facility of some sort. Where deposited cremated remains are devoid of pyre residues, some use of gravity to 'filter out' items for deposition (such as the winnowing or flotation proposed by McKinley, 1989, 73) is certainly suggested by mixing of the cremated bone with small and intrinsically heavy objects such as burnt hobnails, if these objects are indeed classified as being from the pyre. A closer consideration of the skeletal elements in each deposit, or association with pyre goods (footwear, for example) could possibly indicate which part of the pyre bone was collected from; alternative interpretations might be that extremely meticulous collection of certain elements occurred in at least

some cases as a matter of ritual emphasis, or that any variability in parts of the skeleton collected or mixing with pyre goods is simply a function of idiosyncratic conditions of the pyre and in collection from the pyre in each case.

2) Alternative 'pyre debris' deposits

'Pyre debris' must be defined as pyre related primarily on the basis of its burnt human bone content, as well as fuel ash residues and other burnt objects (see above). McKinley argues for four separate classes of 'redeposited pyre debris' from the perspective of find context (2000, 41–42). Once again, however, we need to separate the biases of archaeological terminology from the events it hopes to reconstruct. Thus the term 'alternative', rather than 'redeposited' for such deposits is perhaps more definitive, since burning and leaving of the material *in situ* can hardly be described as an 'act of deposition' *per se*. Similarly, 'material' is less value laden than 'debris', although the latter is retained here in order to evaluate McKinley's sub-types on their own terms.

The first category of alternative 'pyre debris' deposit, 'in grave fills', arguably constitutes a cross-over with another context type, the 'Brandschuttgrab', a category which itself can be further subdivided; this is more fully dealt with below. The second of McKinley's categories of find context for 'pyre debris', 'in pre existent features' (*ibid*), seems to refer mainly to the discovery of pyre related material in archaeological features such as ditches, which might most convincingly be interpreted as having been already 'open' and in use at the time of deposition on the basis of available evidence. However, it is worth noting further 'forensic' considerations in this area, such as whether or not the 'pyre debris' can be shown to a be a discrete deposit among other types of deposit in a given context. This would be especially worthy of consideration if that context were itself a discrete feature, such as a pit. In such a case, surely, the presence of deposits other than 'pyre debris' might give some stratigraphic indication at least as to whether the feature was pre-existing or not. The soil matrix, micro-morphology, inclusions within, as well as associated finds from such deposits may also be worth testing.

McKinley's third category of 'pyre debris' deposit, 'in spreads', accounts for both smaller spreads and more considerable layers of the material discovered at several of the more fully excavated British and other European sites (*ibid*, 42; see Pearce 1999, 41). Interestingly, the larger 'spreads' in particular seem to represent whole areas given over to 'piling up' of material from either successive cremations or mass clearances.

Finally, McKinley's fourth 'redeposited pyre debris' context is 'deliberately excavated features', presumably meaning either large features such as pits dug for the specific purpose of ongoing redeposition of 'pyre debris', or small pits dug especially for the inclusion of a token amount of such material from particular firings. The latter case is again difficult to distinguish from certain types of 'cremation burial' or '*ustrinatum*' grave (Pearce 1999, 41, see below). Indeed, Polfer defines these types of feature as 'Aschengruben' (2000, 30), a technical term more generally taken to refer to burnt deposits containing no human bone whatsoever (Wigg 1993).

Some further ideas might be advanced in this area. Do 'pyre debris' deposits necessarily represent practical clearance of residual material from pyres, on a regular, or *ad hoc* basis, as both Polfer (2000, 32) and McKinley (2000, 39) seem to envisage? It is also plausible that at least some of these deposits represent more profound events involving a change of use for, or 'closure' of a general pyre related area, for example. Indeed, from an alternative perspective, such 'dumps' of 'debris' might in fact be the remnant of what were considered 'primary' deposits, either (in the smaller examples) in line with particular cremations or 'sub-groups' of cremations, or (in the larger category) perhaps a more 'communal' scattering of token amounts left from the pyre, where the further deposition of selected bone within a particular or personalised 'grave' was not to be carried out.

Yet such is the nature of multivocality, that even 'dumping of debris' might be seen as having a special, ritual component, whether this be driven by religious ideas, superstitions, or tradition or even personal viewpoint. Perhaps with further articulated and detailed site research (micro-morphological analysis of layers of such deposits, for example), we might elucidate an increasing variety of depositional practice, and its possible correlations with a diversity of meanings.

3) Cremation burials

The term 'cremation burial' is satisfactory to describe apparently deliberate and structured deposits (or 'formal'? see McKinley 2000, 41) of burnt human remains, with or without other objects or materials. The use of 'ustrinatum' grave to describe such a feature (Pearce 1999, 43) becomes unnecessary if we lack the historic certainty of a distinction between '*busta*' and '*ustrina*' (see above).

The first area of subdivision to be made in this category revolves around whether burnt human bone from the pyre has been sorted from other pyre related material at 'completion' of the cremation and prior to deposition, and whether pyre material has been included within the burial. Pearce has shown that it is useful to adopt some of the German terminology here (*ibid*, 43); burials with pyre 'debris' included can generally be called 'Brandschuttgräber', a class of burial that can be further classified. By this system, 'Brandgrubengräber' are designated as a sub-class of burials where deposited burnt human bone and pyre material are *unsorted and mixed* (note here the possible confusion of such features with 'alternative pyre related deposits', see above); the presence or absence of additional objects would seem to indicate whether we should place a feature such as this in the 'cremation burial' category or not. Alternatively, 'Brandschüttungsgräber' are designated as burials containing *sorted and unmixed* burnt human bone and pyre material.

A further important category of 'cremation burial' by this mode of definition is that which contains sorted burnt human bone with no accompanying pyre material (this 'type' would appear at present to have been most common in Britain). However, it is also worth noting another possible sub-group here of burials that might have all the other 'facets' of a cremation burial, with 'accessory vessels' and other objects, for example, but with very little or no burnt human bone or pyre material at all. Such features, sometimes interpreted as 'cenotaphs', may have been altered by post-depositional processes such as removal and redeposition, 'bioturbation', disturbance, truncation etc, but may equally have been originally deposited with little or no burnt bone or pyre material. As McKinley points out, such features are in need of further examination:

> '(S)ince graves are often classified depending on the quantity and quality of their associated artefacts it seems somewhat absurd that the extreme paucity or even absence of human remains should not be considered of more consequence' (McKinley 2000, 43).

An extremely diverse range of depositional possibilities can be found to underpin and further qualify the above classes of cremation burial. Such indices include the function, quantity and typology of containers for cremation deposits and additional ('accessory' or 'ancillary') vessels and other objects often found to accompany burnt human bone and/or pyre material in the burial. Further qualities of such objects, including selection related to their perceived association with 'status', or the 'age' and/or 'biography' of the objects themselves (see Kopytoff 1986; Swift, 2003) at the time of and prior to deposition need to be considered.

Other special qualities of objects have been associated with cremation burials, such as perceived 'faults', like the use of pottery 'seconds' (vessels damaged or misshapen in the production process, see Tuffreau-Libre 2000, 53). Deliberate modifications can also be noted. Biddulph draws a clear distinction between 'seconds' and vessels 'with deliberate damage' on the basis of the former retaining functionality (Biddulph 2002, 104).

Apart from the reductive nature of the latter qualification (many 'seconds' are so distorted as to be plainly unusable for their apparently intended function), however, the significant distinction between already 'faulty' objects and those that have been deliberately modified (a less loaded word to use than 'mutilation') is a matter of choice on the part of ritual participants, surely. The modification of objects is a more active ritual component, compared with the selection of an object based on pre-existing qualities. We should also note however, that while it is possible to infer ritual 'killing' of objects from 'perforated bases or walls, broken handles or rims or entirely smashed vessels' (*ibid*), it is equally possible to infer selection of such objects because they were *already* 'broken'.

The established framework for analysis of 'grave goods' in cremation burials need not be extensively further defined here. Types of objects often found can be said to fall under four main headings. These are:

a) the 'primary container' of the cremation deposit itself (of burnt human bone, either mixed or unmixed with pyre material). This often a ceramic vessel, although other types of container are also common; the cremation deposit may of course be 'loose', or, in some cases, an organic container such as a bag that has 'rotted *in situ*' can be postulated by the excavator on the basis of possible corroborating evidence, such as the cremated material forming a very discrete deposit within the burial.
b) 'Secondary containers', referring to larger containers that 'hold' some or all of the objects deposited in the burial. I prefer 'secondary container' to 'secondary vessel' (the system used in cataloguing contents of East London burials in Barber and Bowsher 2000, although they use 'secondary container' when dealing with the material in synthesis), as the former allows for not only large vessels such as amphorae, but also boxes, caskets, and indeed other components forming cists such as ceramic building materials or stone. In cases where the cremation material is apparently simply placed in a larger container, such as an amphora, with no other objects, its definition as 'secondary' is of course debatable, and becomes merely a useful analytical distinction from more typical 'primary' containers. In such cases I have elected to record the primary container as 'loose/bagged' within the secondary container.
c) 'Accessory vessels' are an established category (some times 'ancillary' is used). Such vessels might well be ceramic, although again, vessels made of various other materials are often recorded.
d) 'Other objects' can be safely used as a 'catch all' term for the extremely varied nature of additional items other than vessels that are frequently found in Romano-British cremation burials.

All the above categories can be subjected to both quantitative and qualitative analyses, considering not only the 'types' of object present within each burial, but numbers of each type and overall numbers.

A further point to add here is that many objects originally placed within the grave may well not have survived for excavators to find as a result of being in materials subject to decay (Philpott 1991, 8). This well-known problem seems somewhat

insurmountable, with only vague interpretive possibilities generally afforded purely by negative evidence, such as apparently overly large pits for the amount of surviving items present (Pearce 1997, 177), or large areas of the pit being apparently devoid of 'grave goods'. Of course, the latter may actually be evidence of different attitudes/personnel/phasing for the digging of 'grave' pits and the selection of objects to be included within the burial. The fact that such data are often gathered in difficult conditions from heavily truncated contexts (and rely so heavily on the relative expectations of different excavators for their on-site interpretation) only compounds the difficulty of making sound judgements in this area.

Another important area for examination (often not fully explored) is the relative positioning of objects within the specific context of the burial pit. Beyond the obvious spatial factors of 'containment', such as the use of secondary containers like amphorae, boxes, cists etc, little comparative analysis has been made of such factors, especially if we compare the commonly felt significance among archaeologists and other researchers of spatial associations in inhumation burials. Is it just because the obvious bodily references of spatial association have been destroyed in the cremation that this important ritual factor has been historically underplayed in researching cremation burials? To project the expectation of a relative lack of spatial significance onto the cremation burials is a flawed approach embodying a culture-specific self-fulfilling prophecy. Alternatively, it may be the complexity of spatial relationships within cremation burials that has made a large-scale survey seem impractical or self-defeating.

Some suggestions about specific factors have been made; for example, E.W. Black, in a pioneering essay into archaeological evidence for classical religious belief in Roman-Britain, drew attention to the positioning of deposited footwear in several examples of cremation burials, although, apparently on the basis that more evidence is needed, offered no explanation for possible depositional patterns (Black 1987, 216; Fig. 4 and Appendix).

Pearce has demonstrated a systematic approach to the spatial qualities of each burial pit in comparison with factors such as gender and age in his analysis of the King Harry Lane site. In addition to relative positioning of burials within the cemetery as a

whole, Pearce's research also focuses specifically on relative sizes of burial pits, and positioning cremated human bone therein (Pearce 1997; 1998; 1999, 8.2). The findings indicate an overall pattern of decreasing burial pit area over time (Pearce 1997, 177), as well as a propensity to place cremated bone 'at the western end of the pit, irrespective of age and gender' (*ibid*; see results in Pearce 1998, 104). Indeed, according to Pearce, '(T)he internal layout of the grave sometimes displays striking patterns, although these have rarely been examined' (1998, 104). The relative positioning of objects on horizontal as well as vertical axes is evidently full of possible significance, as is the *intrinsic* positioning of single objects in relation to those axes (such as pointing an object in a certain direction, or inverting it).

Biddulph, primarily in an attempt to lead interpretations of pottery assemblages away from 'simple' matters of form and function or the basic idea of symbolic sustenance for the afterlife, has attempted to articulate an archaeological approach to certain spatial features as well as matters of modification and selection of vessels, pointing out the

> '...need to invent a typology of burial that incorporates inversions, vessel placement, mutilations and inscriptions, so that we do not lose these 'conceptual' data from the analytical data.' (Biddulph 2002, 110).

This statement needs to be advanced beyond analysis of finds towards a consideration of variability in Romano-British cremation and associated deposition in general.

From the forgoing it is clear that if wider aspects of selection, modification, and spatial and temporal features of ritual action are taken into account, definitions of 'types' of cremation burial based on one facet, such as 'amphora burials', 'box burials', or indeed 'Brandschuttgräber' are demonstrably narrow in terms of the variability in the evidence. Such terms only define part of the evidence, such as what sort of secondary container is present, or whether pyre material has been included in the burial; these are obviously significant factors, but matters of selection, modification and spatial relationship must be afforded an equal possibility of significance, and show that considerable diversity lies behind such general labels.

A final point to be made in this area relates to the assumption that deposition of cremation burials constituted a single completed event, and the conclusion of a funerary sequence. Some suggestions that this was not (at least not always) the case can be advanced from the evidence. If we think of 'lids' for cremation containers for example, whose apparent rarity might actually be a function of their relatively vulnerable position (in terms of truncation by subsequent intrusive features, disturbance by later ploughing, etc), a typical interpretation revolves around practical considerations of 'protecting' the contents of a container in perpetuity (although a reason or meaning for such protection is often only implied).

An alternative viewpoint might re-cast the 'lid' as at least implicating the revisiting of burials and containers, and the reviewing of or simply access to contents, perhaps in order to administer libations etc. Other (albeit rare) evidence, such as 'pipe burials', where a pipe attached to a lead canister containing the remains appeared to allow for further deposition, (Philpott 1991, 28) would tend to support this idea, as would surviving evidence for grave markers, or organised cemetery layouts showing patterns of 'respect' for previous (and ongoing?) deposits. Literary and archaeological precedents of funerary meals at the tomb to celebrate birthdays and festivals in the Roman context might also be invoked here (Toynbee 1971, 50–51), but we should be careful not to simply use such evidence out of context (cf. '*Busta*'). Erection of burial markers, mausolea, barrows etc might also be invoked here. Again, the archaeological evidence for all such practices, except in particular cases of survival, has generally been the first to be lost through both natural and cultural post-depositional processes.

The implications of revisiting and continued use of cremation burials after initial deposition, rather than deposits representing a final 'resting place' or 'abandonment', might of course be highly significant. For now, however, it is worth bearing in mind as an alternative avenue of interpretation.

4) Special deposits

Here we are dealing with evidently 'structured' deposits of material other than burnt human bone, interpreted as having been deposited within the same general mortuary context or 'area', and chronology as apparently associated cremation burials and/or

pyre sites. These deposits might generally be sub-divided into those which include burnt or un-burnt materials, although of course a mixture of such materials is also an option that needs to be accounted for.

In the burnt category, we should certainly include Wigg's 'Aschengruben' (1993; see also Pearce 1999, 45), deposits of burnt material notable for the absence of human remains apparently placed or tipped into specially dug pits often about the same size as cremation burials. Deposits of such material in pre-existing features is also a possibility (cf. alternative 'pyre debris' deposits above). Yet whether such deposits are indeed constituted of pyre material is again worth questioning, as without the presence of burnt human bone there can only be a more tenuous link to 'the pyre'; by definition, the material may have been burned separately, and the lack of burnt human bone would actually tend to support this interpretation rather than the former.

In the un-burnt category, the finding of apparently carefully placed or concentrated groups of whole vessels with no cremation related contents, or of concentrations of certain material (potsherds, cow bones, seal-boxes, skulls, oyster shells etc.), either in specially dug or pre-existent features, may well indicate ritualised deposition associated with cremation rites. This spectrum of deposition should also of course include animal burials interpreted as being in proximity with cremation related features. In all the latter cases, it might be enlightening to check for further evidence of ritualisation, such as qualities associated with selection and modification, as we would with cremation burial assemblages.

5) Redeposited and disturbed materials

Finally, redeposited objects/deposits and deposits that have been subject to disturbance need to be considered. Apart from developing an understanding of phasing and stratigraphy on given site, however, there are also interpretive issues to deal with here.

How we decide whether or not deposits are 'redeposited' is a matter once again of inference. For example, if we expect that 'cremation' is chronologically likely to precede 'inhumation' as the primary means of disposal of the dead on a given site, we

might, when faced with a cremation burial apparently inserted into the backfill of an inhumation (lacking dating evidence), infer that the digging of an inhumation 'grave' accidentally disturbed a cremation burial, which was subsequently carefully reburied as the inhumation was backfilled. Yet other interpretations can of course be proposed; the inhumation may indeed have come first in the sequence, for example, or there may have been some perceived connection between the inhumed and cremated 'occupants' of a single context, despite being treated differently in other respects in death: perhaps there is evidence here of continuity of use of a specific burial place.

Moreover, dating of cremation burials is often given over a wide range, representing the problems associated with the assemblage of objects with various typologies. This can easily be 'imprecise' enough to create a deal of overlap with dating of finds from features into which the burials seem to have been 'redeposited'. Also it is not at all implausible that cremated remains were (at least in some cases) kept for considerable amounts of time, and indeed transported over considerable distances, prior to deposition; even deposition may have been considered more temporary than we often assume. Critically, then, an open mind is required (particularly at the excavation stage) in order that stratigraphic relationships are not informed by predetermined chronologies.

Interpretations of accidental or deliberate 'disturbance' of cremation related features should also be considered in relation to associated and comparative contexts. In drawing such inferences, it is again important not to be wholly guided by 'common sense' explanations. After all, disturbance and destruction might be equally ritualised, perhaps for example with the idea of severing and preventing continued contact between the dead and the living.

Conclusion

This research will focus on particular ritual sequences of cremation and associated cremation burials mainly as evidenced by cremation burials (and some pyre sites), incorporating evidence of alternative deposits of pyre material and other special deposits as more general information about practices as site level.

In the cremation context, the 'pyre' can be seen as an arena where specialised knowledge, skills and activity may have been paramount; a degree of homogeneity of practice might thus be expected, although subtle differences in technique might be visible in well preserved and recorded data; 'pyre goods' might offer greater opportunities for particular stylisation of this part of the funerary sequence.

Associated depositional practice on the other hand appears to afford much greater potential for diversity in terms of depositional contexts, placement, and the types of deposit. Continued use or closure of pyre sites, deposits of pyre related material, cremation burials, other special deposits and redeposition of disturbed material are all areas where selection and modification of materials, as well as temporal and spatial features provide the indices for variation and therefore stylisation.

4. Method

General information

The next chapters detail the results of comparative case studies from the Canterbury area (remainder of Volume 1), Colchester and East London (Volume 2). The sites were chosen in order to provide reasonable geographical separation between case studies, so that regional variation might be highlighted, and also for the quality of their records either in publication or archive or both. The material available had to be of a standard that could afford in-depth analysis of the selection and modification of materials, as well as the temporal and spatial features of ritual actions at cremation and deposition stages, so that profiles of ritual sequences could be developed (see below). Each of the case studies are described in further detail in the following chapters; Part Two considers four sites from the Canterbury area (Each End, Ash; Crundale Limeworks, Crundale; Cranmer House, Canterbury; St. Dunstan's, Canterbury), while Part Three compares sites from Colchester (Turner Rise; Abbey Field) and East London (various).

The original archive and any published data then were consulted for each site; site records (plans, recording sheets, photographs etc) as well as specialist reports were screened for any relevant information available. Data were collected in a relational database designed to a broad and reflective approach to the data. The initial "template" for the analytical approach had to undergo some development during the data collection process itself, as database criteria were found not to be viable in terms of the amount and/or quality of information available. This often meant revisiting earlier records and adapting them to fit within a new scheme.

Analyses were both quantitative and qualitative in nature, running select queries in the database in order to produce comparative charts and graphs in terms of numbers and types of objects, as well as comparing qualitative aspects (such as specialist selection, modification and complex spatial features).

Spatial sub-groups

Spatial sub-groups within sites could be suggested on the basis of demonstrable clusters of burials, separation by other features such as ditches, roads etc, and apparently different plots delineated by ditches. While obviously interpretive, such groupings provided a further index for comparison between burials (discrete ritual sequences), and both extra- and intra-group patterns and diversity were noted.

Phasing and chronological sub-groups

The date of each ritual sequence (based on an average of date ranges of contents of cremation burials) was initially recorded in terms of a field for the earliest date and a separate field for the latest date as reported. This approach was subsequently found to be in need of some adaptation, however, as a result of the varied dating methods deployed in the different archives/reports. I have therefore developed my own phasing system for the purposes of this study, which allows both for variant dating methods between different sites and for differing degrees of confidence in date ranges for different burials. It should be stressed that the system is only put forward as a way of expressing *probability* of date ranges for individual burials that can be used to compare within and between sites.

All burials from each site tended to be initially dated mainly by ceramics specialists (as ceramics are often the most diagnostic of burial contents for the purposes of dating), although some adjustment to this general estimate could sometimes be made on the basis of small finds reports and stratigraphy.

Having recorded the data, there was an obvious imbalance in the records in terms of the overall dates offered by different specialists. In the case of some burials, for example, dates were estimated according to the latest possible manufacture date of samian vessels (a higher status fine ware import often stamped by the manufacturer and with a relatively detailed typology and provenance) within the pits, while in other cases a short time for import and for ownership of such expensive table ware was arbitrarily included in the estimate, thus giving a later date. Alternative ways of expressing dates were also encountered (such as "second half of the second century"

[AD] or "mid to late second" or "150–200"). Such systems had to be homogenised for comparative purposes. I have devised the following method in order to translate these various approaches into a comparative system, taking into account the various meanings of phrases such as 'early', 'mid' or 'late' as put forward by different specialists in relation to their data. In general the use of such terms could be translated thus:

Worded date boundary	Numeric equivalent
"early"	00–20 in any century
"early to mid"	20–50 in any century
"mid"	45–65 in any century
"mid to late"	60–90 in any century
"late"	80–00 in any century
"late to early"	90–20 in any centuries

Figure 1.13: suggested numeric equivalents for worded date boundaries

Thus "early to mid- second century" would be recorded as 120–150, "late third century to early fourth" would be recorded as 290–320, and so on. Where date ranges were wider, composites of the above could easily be formed in order to take account of greater insecurity over dating; thus a date range of "mid- first century to early third", or "mid- first century to third", could be rendered as 50–220. Alternatively, a date expressed as "mid- second century to mid- third" was recorded as 150–250. A general date such as "second century", for example, was recorded as 100–200, and so on. Where dating on these grounds was less precise, a less certain date range was recorded (see below).

A further complication was that, in order to generate composite dates for burials, dating methods for individual objects within burials had also to be homogenised, because date ranges suggested by specialists for specific objects were also subject to varied dating methods. For instance, some expressed dates in broad, worded categories such as "mid to late second century", while others gave number ranges, and advocates of both methods occasionally used terms such as "Antonine", or

"Hadrianic-Antonine", with apparently varied definitions of the same ranges, thus further compounding the problem for comparative analysis between sites.

In the case of worded date ranges, the same scheme of numbering as indicated above for overall burial dates was adopted, with phrases like "first quarter" or "second quarter" suggesting more obvious conversions to date ranges expressed as numbers. When dates had been expressed by imperial dynasty, such as 'Neronian' or 'Trajanic' (usually samian or other imports), a general set of date ranges was applied, taking into account the vagaries of artefact dating given factors such as trade, the possession of objects prior to deposition etc. Emperor based date ranges devised for this study when such dating was encountered thus represent a simplified and homogenised system in order to allow for more general comparative analysis. The use of the very exact date ranges of the historical index of the changing emperors is, after all, a little arbitrary when dealing with the production and use of any material culture that has no direct link to imperial history. The following is a list of the "imperial" dates encountered and how they were rationalised in each case (all dates are AD):

Dynastic date	Numeric Range
"Claudian"	40–55
"Claudio–Neronian"	45–65
"Neronian"	55–70
"Flavian"	70–95
"later Flavian"	80–95
"mid-Flavian–early Hadrianic"	75–125
"Trajanic"	95–120
"Hadrianic"	120–135
"Hadrianic–early Antonine"	120–155
"Hadrianic–Antonine"	130–170
"Antonine"	135–200
"mid- to late- Antonine"	170–200

Figure 1.14: proposed conversion of dynastic dates to numeric ranges

In all cases where dating was changed in any way from that given in the specialist report, the original dates given were recorded also.

Once dating of particular objects had been translated into number ranges, and these had been used to devise overall date ranges for burials, the generalised system for phasing of burials could be attempted. The system places some emphasis on the earliest date for each burial, expressed as the number of the century, but also takes account of the latest date range, with the letters a, b, c or d suffixed as an expression of the confidence with which the latest date for the burial is 'known'. This generated phases as follows (all AD):

Earliest	Latest	Phase
'0'	100	1a
50	150	1b
50	150–250	1c
50	>250	1d
100	200	2a
150	250	2b
150	250–350	2c
150	>350	2d
200	300	3a
250	350	3b
250	>350	3c
300	400	4a
350	>400	4b

Figure 1.15: Overall phasing system

In this system burials in phases 1a, 2a, 3a and 4a can be considered as more certainly belonging to first, second, third and fourth centuries respectively, whereas those in phases 1b, 2b etc were more likely to be in the second half of a given century (the latest date being more certain here) or early in the next. The 'c' and 'd' phases represent less and less certainty as to whether a burial could be dated to a particular

century. Where date ranges were wider than these categories burials were placed in the later phase as a control. The phasing system was treated as a starting point for discussion of relative chronology of burials, and caveats such as overlap between phases, or the relative difficulty of dating burials with single datable finds as compared with those with larger numbers, should be borne in mind.

Numbers of individuals in each deposit, sex and age sub-groups

Specialist criteria for sexing and aging of human remains were also found to differ from site to site and from specialist to specialist, so that these data had again to be rationalised into an overall system in order to make them comparable.

Age	Sex	Codification
Unknown	Unknown	U
Infant	Unknown	Iu
Child	Unknown	Cu
Young adult	Unknown	Yau
Young adult	Female	Yaf
Young adult	Possible female	Yafp
Young adult	Male	Yam
Young adult	Possible male	Yamp
Adult	Unknown	Au
Adult	Male	Am
Adult	Possible male	Amp
Adult	Female	Af
Adult	Possible female	Afp
Older adult	Unknown	Ou
Older adult	Female	Of
Older adult	Possible female	Ofp
Older adult	Male	Om
Older adult	Possible male	Omp

Figure 1.16: codification of sex and age categories of human remains

In Figure 1.16, Infants are defined as neonates or children under three years as identified by specialists, while 'children' form a general category above this age. The categories 'young adult' and 'older adult' refer to more confident specialist identification of either adult remains with diagnostic qualities such as un-fused epiphyses (perhaps indicating an age of perhaps 18–21 years), or of fused cranial sutures or other indicators of 'old age'. The 'adult' range is admittedly very broad, reflecting less certainty overall as a result of diagnostic debates; this is however a valid reflection of differing degrees of confidence and (at least current) levels of uncertainty. In this survey the categories 'young adult' and 'older adult' are therefore offered as qualifiers of a more generalised 'adult' group.

Definite classifications of sex are only given where the specialist is certain and has cited diagnostic evidence, while only one category of 'possible' sex classification is used for each sex (some specialists use varying numbers of question marks, for example, to record differing degrees of confidence in each case). Not surprisingly, given the sample qualities and diagnostic difficulties associated with cremated bone, 'adults' of unknown sex form the largest category in the results (see below). Where remains of more than one individual were found to be present within a single cremation deposit, both sets of details were recorded.

Cremation

The first part of the attempted reconstruction of each ritual profile dealt with cremation. Evidence from pyre sites, alternative deposits of pyre related material, and cremation burials was analysed in terms of a) cremation methods and techniques, b) 'pyre goods', and c) post-pyre collection methods. Any patterning or diversity in the data was in turn considered in relation to chronology and spatial sub-groups within cemetery areas, as well as sex/age and other groups.

Cremation techniques and materials

This category included any evidence of construction, burning and 'closure' of pyres, such as the morphology of and deposits associated with pyre sites, the morphology and deposit components of any features associated with alternative pyre material deposits, and residual pyre materials from cremation burials. The main focus was in the latter two categories was the nature of any pyre related material present, relating to fuel, structure, kindling etc; environmental samples were also considered in this regard and, where present, proved a highly informative resource.

The number of individuals in each deposit was considered in case of possible indications of repeated use of pyre sites, combined cremations, or of individual pyres (although this was obviously subject to collection methods and the accidentally determined presence of diagnostic bones). The fragment size of cremated bone from intact deposits was analysed as a possible indicator of the level of intrusive pyre methods, as was the colour of the cremated bone; the latter may give an indication of local or particular methods, but minor variations from the off-white (i.e. fully mineralised) colour were not considered significant because of the complex and variable nature of any pyre cremation. Lastly, diagnostic features of 'pyre goods' were examined, accounting for any features of 'pyre goods' that may suggest pyre methods and/or the physical relationship between such objects and the pyre (such as fragmentation and degrees of burning or melting).

'Pyre goods'

The types, amounts and qualities of 'pyre goods' themselves were also considered from burial to burial (there were few sites where pyre sites could be compared at the time of writing, and alternative deposits of pyre related materials could only give clues as to general site level practices). Materials included animal remains (animal type, part of animal, age of animal etc.), plant remains (type, part etc), and other 'offerings' such as probable or possible dress items and accessories etc. Again, the apparently 'accidental' nature of inclusion of all such objects with final cremation deposits had always to be taken into account when comparing between burials.

Collection

Weights of undisturbed cremation deposits might vary according to particular collection methods as well as possibly diverse ideas as to how much is 'correct' in each case. Deposits assessed as adult were compared to a rough average of 1500g and a range of 1000–2500+g for the total amount of cremated bone one might expect to result from a 'complete' adult cremation. These figures are derived from averages and ranges put forward by Malinowski and Porawski (1969; cited Mays 2000, 220), who suggest 2004g and 1540g respectively for weights of cremated bone from males and females, Trotter and Hixon (1974; again cited Mays 2000, 220) who propose an average for adult males 2,288 [range 1,534–3,605], adult females 1,550 [range 952–2,278]' and McKinley (2000b, 269), who argues for a figure for adults between 1000g and 2400g 'with an average of *c* 1650g'. Trotter and Hixon also suggest lower figures for children (*ibid*), which had to be taken into account. Where more than one individual was deemed to be present, the overall weight was recorded, and numbers of individuals noted.

Other possible sources of evidence for collection methods were analysed in this regard, such as the types of skeletal elements present, other human remains (the remains of more than one individual might suggest communal pyre and/or collection methods or repeated use of the same facility, for example), as well as animal remains, plant remains and other remains including 'pyre goods'. The presence of each of the latter or certain combinations might suggest flotation or other 'wholesale' methods of collection, as opposed to fingertip selection from a cooled part of the pyre. Once again however, all such classes of evidence had to be analysed under the general caveat that absence of evidence may be purely accidental rather than indicative of diverse ritual profiles.

Deposition

A systematic profiling of the deposition stage of the ritual sequence was carried out through analyses of cremation deposits, pit design, primary containers, secondary containers, accessory vessels, other accessories and any evidence suggesting post-

depositional or secondary rites. In each of the above categories, selection (whether such an item was included or not, the numbers and types included, any further qualities), modification (breakage or otherwise) and spatial features (in relation to the burial as a whole, in specific relationships between specific objects, and in terms of particular types of placement, such as inversion) was analysed. A further codification and comparison of entire burials in terms of combined selection of objects was also attempted (see below).

Cremation deposit types and pit design

Deposits were examined firstly in terms of whether bone had been sorted from pyre material, and whether pyre material had been incorporated in the burial in order to test for the presence of 'Brandschuttgräber' or burials with no bone alongside the more common deposits of cremated bone that had been separated from pyre material. The location of the cremated bone within the pit was also recorded and compared between burials. Next (where viable), aspects of pit design such as the widest extent (expressed in metres), approximate shape, any internal cuts, and deposits other than 'grave goods' were noted in each case.

Selection

Numbers, types (forms, provenance etc.), and aspects of specialised selection (qualities such as the use of 'seconds', apparently new or damaged objects, etc.), of primary containers, secondary containers, accessory vessels and other accessories were recorded for each burial and compared at each stage, building a profile of uniformity and diversity. In terms of accessory vessels in particular, combinations of types were compared, and a codified field comparing a generalised 'combined selection' of primary and secondary containers, accessory vessels and other accessory vessels in each cremation burial was also generated in the database.

A simplified codification for combined selection was developed on a cumulative principle, giving each burial an individually coded profile using the following rules:

Stage	Burial component	Variable
1	Primary container	N = no cremated bone L = loose/bagged G = glass C = ceramic U = unknown
2	Secondary container	N = none W = wood A = amphora T = tile cist U = unknown
3	Number of accessory vessels	'00' = none Or number of accessory vessels
4	Types of accessory vessels in order (also used for comparison of accessory vessel combinations)	F = flagon, flask or other pouring vessel C = cup, beaker or other drinking vessel D = dish, platter, etc B = bowl J = jar S = 'special' (e.g. miniatures, etc.) U = unknown
5	Number of other accessories	'00' = none Or numbers of other accessories
6	Types of other accessories in order	F = footwear (counted as one object) G = glass vessel L = lamp B = brooch M = mirror C = coin S = 'special' meaning any other types U = unknown

Figure 1.17: rules for codification of combined selection of objects for cremation burials

Thus a cremation burial containing a ceramic primary container ('C'), no secondary container ('N'), no accessory vessels ('00') and no other accessories ('00') would be

codified as 'CN0000'. On the other hand an amphora burial ('A') containing a loose or bagged cremation deposit ('L'), a flagon ('F'), beaker ('C') and dish ('D'), and a coin ('C') would be codified as 'LA3FCD1C'.

Types of accessory vessels and other accessory vessels were codified in order, so if a certain type was missing it could simply be left out of the list. For example, a box burial ('W') with a ceramic primary container ('C'), and flask ('F'), bowl ('B'), jar ('J') and miniature vessel ('S'), and no other accessories would be codified in this system as 'CW4FBJS00'. Furthermore, where there was more than one of a certain type of accessory vessel or other accessory, the code used no repetition of letters, but merely signified the repetition of a feature in the number of objects. Thus a burial with much the same components as the last example, but with two miniature vessels, as well as two coins, say, would be codified thus: 'CW5FBJS2C'. The same combined selection profile with additional brooch and footwear is codified as 'CW5FBJS4FBC', and so on. Where any aspect of the combined selection was recorded as unknown ('U') the overall code was not included in comparative analyses.

It can be seen that such a coded system cannot account for many of the more detailed and diverse qualities of selection of objects such as certain forms, provenances, age of object etc, let alone modification of objects and spatial features within each burial. Nonetheless, it is proposed and tested here as a prototype for more detailed comparative analysis of entire burials.

Moreover, it should be stressed that we are dealing in each case only with objects that have survived post-depositional processes; as any that were perishable must remain unknown to the archaeologist, this is a limitation of the archaeological record that must be accepted (until such time as new methods of excavation and/or analysis might throw light on objects as yet invisible to us). Future excavations of sites where special conditions have caused such materials to survive might also be informative, at least in terms of the possibilities we may need to take account of.

Modification and spatial features

Details of any possible modification of objects were noted in each case, although the possibility that objects had been modified either deliberately or accidentally prior to deposition and for reasons other than ritual, or that post-depositional processes had had an impact, had always to be taken into account.

Various aspects relating to possible spatial features of ritual had to be accounted for. First the approximate location of cremation deposits within the pit was recorded using north-east, south-east, south-west and north-east quadrants, or north, east, south and west positions in relation to the centre of the pit, although in the event a 'central' location was most often recorded for such material. The location of all other objects in the pit was recorded in relation to the cremation deposit, again using quadrants or vectors as appropriate. More complex spatial relationships between objects were also recorded, such as placement of objects within, beside, above or beneath other objects, as well as particular placement of objects themselves, for example inversion.

Post-depositional or secondary rites, redeposition

Finally, all possible evidence for post-depositional or secondary actions, including redeposition was recorded for each burial. Lids for primary containers, markers for burials, or spatial respect between burials were considered to be the best evidence in this area, although the overall assumption of contemporaneity of deposition of objects within burials could always be challenged, and further research on this aspect alone can be proposed (see Chapter 11).

The nature of post-depositional damage, but more especially discovery and excavation conditions, however, often rendered a comparative survey of this aspect difficult, as the upper contexts of each burial (the most likely to contain information related to revisiting) had all too frequently been irreparably damaged and unrecorded during discovery. Unfortunately, current excavation strategies of 'rescue archaeology' are unlikely to produce any better data for future research.

Profiles

All possible site level traditions, chronological patterns, patterns related to spatial sub-groups, sex/age groups, or other groups (such as adjacent burials), or of burial level diversity have been isolated and analysed, and an overall site profile generated in each case study. The site profile has then been compared with local sites in order to check whether or not a localised profile can be suggested.

Part two: east Kent case studies

Four archaeological sites in the Canterbury area were selected for analysis (representing three separate cemeteries) on the basis of quality and quantity of available data and relative location at rural and urban settlements (see Figure 2.00).

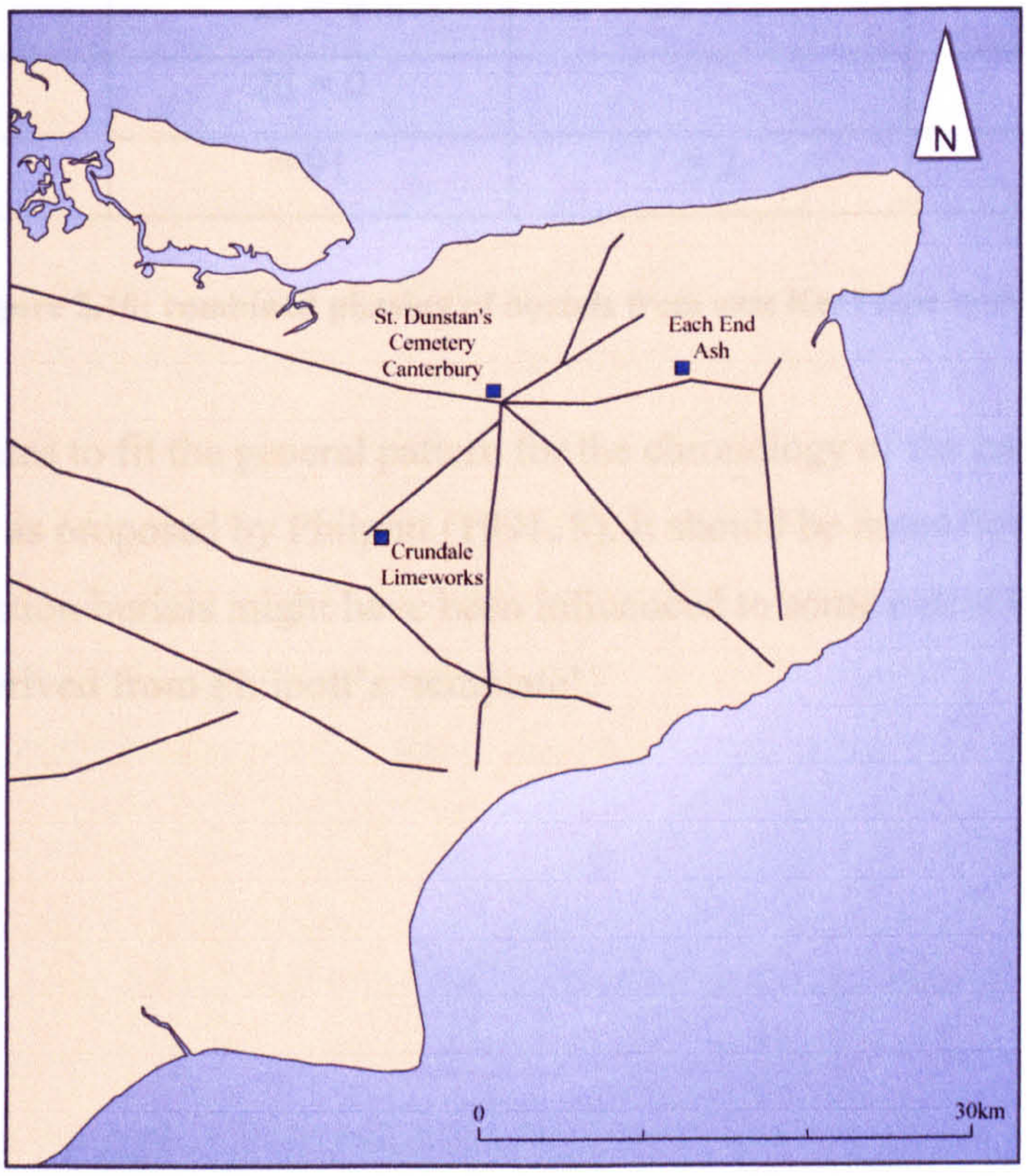

Figure 2.00: Location of east Kent case studies.

The sites concerned are situated at Each End, Ash, near Sandwich (Hicks 1998), Crundale Limeworks, Crundale, near Canterbury (Bennett 1985), and Cranmer House, London Road, Canterbury (Frere et al 1987) and St Dunstan's Terrace, Canterbury (Diack 2003); the two Canterbury sites are apparently adjoining although excavated over fifteen years apart. The overall sample consists of 145 cremation burials with most deriving from the Canterbury cemetery as compared with two local 'rural' sites (Each End:15, Crundale Limeworks: 8, Cranmer House: 41 and St Dunstan's Terrace: 81). The total numbers of burials within each phase in the selected

sites seems to indicate a bias towards the first and especially second centuries, tailing off during the third.

Phase 1	Phase 2	Phase 3	Phase 4
1a = 14	2a = 33	3a = 1	4a = 0
1b = 9	2b = 50	3b = 0	4b = 0
1c = 14	2c = 9	3c = 1	
1d = 5	2d = 0		
= 42	= 91	= 2	= 0

Figure 2.10: combined phasing of burials from east Kent case studies

The sample seems to fit the general pattern for the chronology of the cremation rite in Roman Britain as proposed by Philpott (1991, 8). It should be noted however that dating of cremation burials might have been influenced to some extent by expectations derived from Philpott's 'template'.

5. Each End, Ash, near Sandwich

Introduction

Fifteen 'cremation burials' were located in three groups at Each End, Ash, Nr Sandwich, Kent (N.G.R. TR 304585) during developer funded trial trenching and open area excavation. The Canterbury Archaeological Trust carried out the work ahead of the building of a new by-pass between April and July 1992 (Hicks 1998, 91). The site is situated on the west side of the Wantsum Channel; the burials are associated with a Roman road on a south-west–north-east alignment, which perhaps originally headed for a ferry crossing to Richborough fort and settlement, only 2.2 km. to the north-east. My data are derived from the published report (Hicks 1998), as well as archive reports and the original site archive housed at the Canterbury Archaeological Trust offices; these include: Anderson 1992; 1998; Hicks 1992; 1998; Savage, 1998. No details of carbon or plant components of cremation or other burial deposits, or of specialised selection or modification of accessories were available for analysis.

One burial (S21) was raided and destroyed by clandestine metal-detector users, another (S26) was disturbed as a result of the machine levelling of the site, although in the latter case the approximate location is indicated, and most if not all contents appear to have been recovered from the ditching bucket (Hicks 1998, 112–113).

The features interpreted as cremation burials in the original report were found to cluster in three distinct groups (see Figure 2.20):

'Group 21': four burials to the north of the road
'Group 22': nine burials to the south-east of the road
'Group 23': a further two burials (together with an inhumation burial) to the south of the road.

Group 22 appears to have been delineated by a ditch and gully system (although this requires a reassessment of phasing, see below); Groups 21 and 23 to the north and

south of the road respectively lie at the limits of excavation and so it is unknown whether they were physically defined in the same way.

In the interests of clarity, throughout the following analyses I have used my own group names for the spatial sub-groups, each in terms of their locations in relation to the Roman road. Thus 'Group 21', north of the road is referred to as 'N', 'Group 22' south-east of the road is called 'SE' and the southern Group 23 is called 'S.'

All except one of the burials (S21, which was disturbed and therefore only datable to 'the second century') appear to date from mid–late second century, and are consigned to my general phase 2b (c. AD150–250). Thus (on the available evidence) the use of each of the burial plots seems to have been relatively short lived (perhaps only fifty or a hundred years), making any attempt at viewing a detailed chronological development of ritual styles at Each End impossible. The following analyses therefore of necessity concentrate on variation in styles among broadly contemporary cremation rituals.

The apparently limited use of the plots is of course of interest in itself, perhaps suggesting a clearly defined access to cremation and associated deposition in this local area in the mid–late second century. Certainly there would appear to be a further spatial emphasis of the burial plot for the group to the south-east of the road in particular (see Figure 2.20) in the shape of extensively re-cut ditches (groups G26, G27, G28, G29, G32 etc) apparently demarcating an area of mortuary deposition.

The excavator has described the 'complex of ditches and gullies' surrounding this south-east group as 'interwoven with settlement features…' and regards them as 'drainage channels', a response to especially low lying and waterlogged conditions (Hicks 1998, 107). However, evidence that the early phase of the ditch sequence surrounding the group (comprising early road ditch G9, as well as G32) was 'deliberately backfilled by the dumping of rubbish deposits, containing quantities of charcoal, daub and pottery…' and that this deposit preceded a re-cutting of the road ditch (G10) on a new alignment 'in order to insert a small structure' (*ibid*, 99), rather suggests a change of use for the area, perhaps associated with its having gone out of

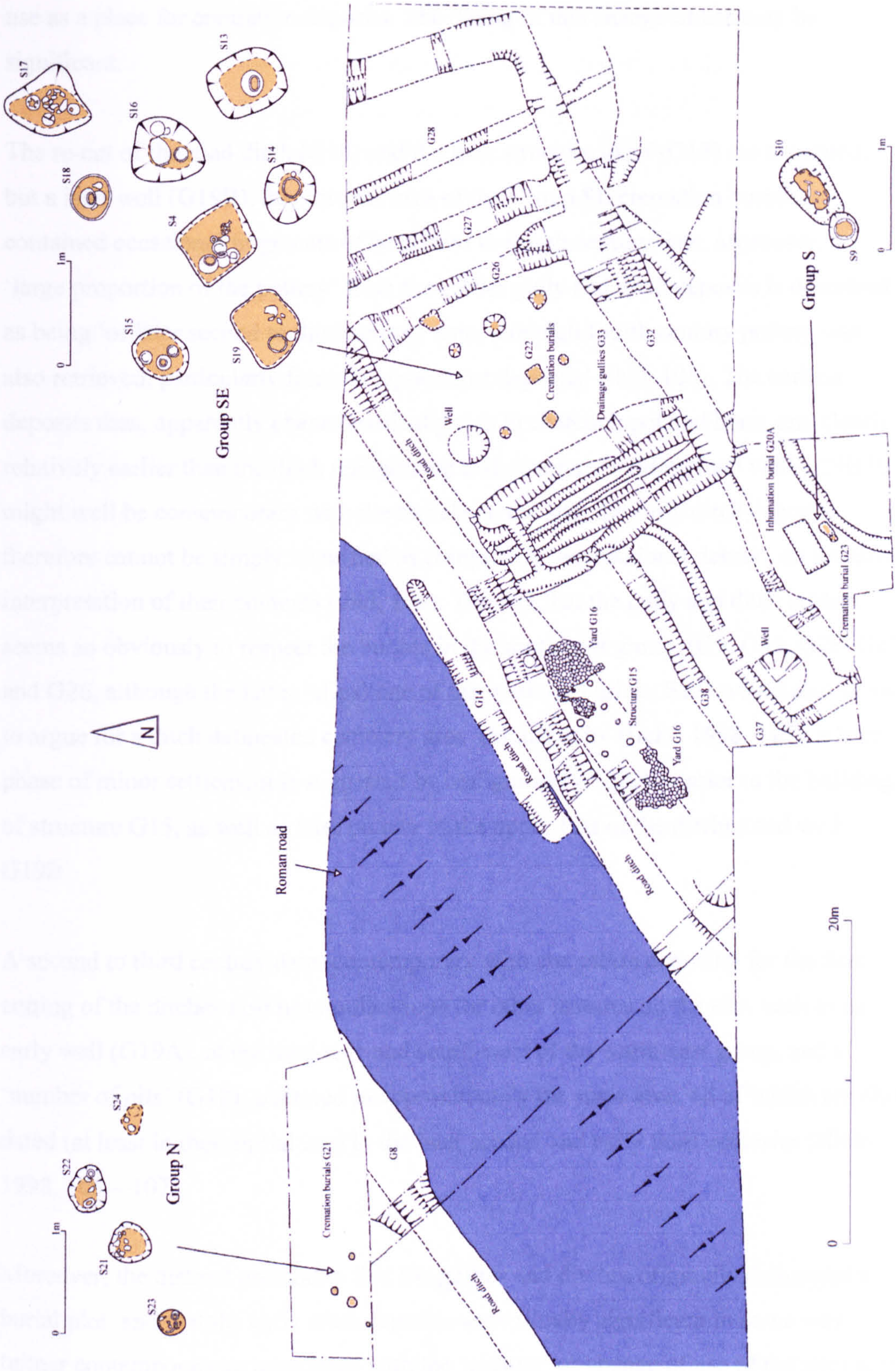

Figure 2.20: Each End, Ash: site plan and burial group details (after Hicks 1998, Figs. 1, 5 and 6)

use as a place for cremation deposits. The dating of this change of use may be significant.

The re-cut of the road ditch (G10) and the later structure itself (G15) are not dated, but a later well (G19B), dug into the area of the Group SE cremation burials, contained occasional fragments of later third to fourth century date. Moreover, a 'large proportion of the pottery' from the earlier gully and ditch deposits is described as being 'of later second to third century date, although fourth century pottery was also retrieved, particularly from the uppermost deposits' (ibid, 108). The earliest deposits then, apparently characteristically rich in charcoal, pot and bone, and clearly relatively earlier than the ditch realignment and structure building (and well G19B?), might well be contemporary with the burials on the site; the early ditch deposits therefore cannot be simply identified as comprising 'occupational debris', an intuitive interpretation of their contents (ibid, 106). The fact that the gully and ditch system seems so obviously to respect the burials in the south-east group, (G9, G32, G28, G27 and G26, although the latter 'clips' one of the westerly burials, S17) would also seem to argue for a ditch delineated cemetery area (hinted at by Hicks, 1998, 115); a later phase of minor settlement is suggested by realignment of ditches prior to the building of structure G15, as well as later pottery in the upper fills of the ditches and well G19B.

A second to third century date (contemporary with cremation deposits) for the first cutting of the ditches also has implications for other features on the site, such as an early well (G19A), at the road-side and south-west of the south-east group, and a 'number of pits' (G18), scattered in approximately the same area, all of which are also dated (at least in their initial use) to the later second and early third centuries (Hicks 1998, 105—107).

Moreover, the distinct possibility that the gullies and ditches originally delineated a burial plot, and that the early ditch deposits were ritually significant in some way (either contemporary or associated with the 'closure' or change of use of the site) also provides a more credible context for possible special deposits, such as a complete articulated dog burial (the burial lay on one side above the primary silt of the gully, with head, tail and legs extended), and an almost complete pot. The pot was again

contemporary with the cremation burials, typologically similar to many used as primary containers at Each End; no trace of contents led the excavator to suggest that 'the pot was simply discarded in the gully because it was broken' (*ibid*). An alternative suggestion, equally viable on the basis of the evidence as presented, is that this vessel was originally placed in the ditch as (or containing) a special deposit, and that it may have been deliberately modified through breakage.

Of the twelve bone deposits (from separate burial contexts) sent for analysis, none were thought to represent more than one individual. The majority of the burials were classed as containing the remains of adults (see appendix 1.0), although one (S18) was thought to be possibly the remains of a young adult female (18–23 years). In fact, only females were positively or possibly identified, the remainder were of unknown sex.

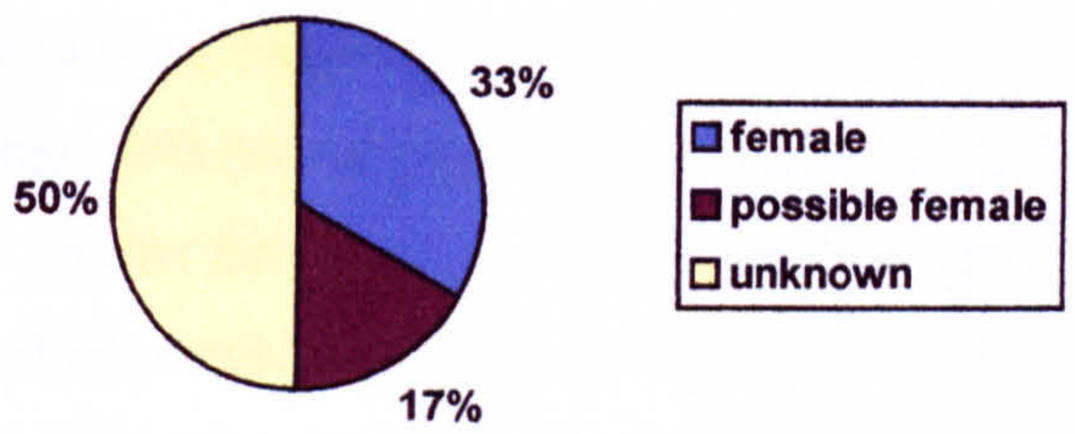

Figure 2.21: sex of human remains at Each End, Ash (n= 12: female=4 possible female: =2, unknown= 6 (data from Anderson 1998, 126).

Cremation

At Each End no pyre sites or alternative deposits of pyre related material were identified or recovered within the area of excavation. Charcoal components of cemetery ditch deposits, and charcoal 'flecking' of the 'bedding deposits' within burials (see below) are suggestive of some sort of burning nearby, but no detailed records of the diagnostic qualities of these deposits has been kept.

No charcoal, sooted objects, burnt clay or charred plant remains were reported as mixed with the cremated bone and only a small number of iron objects, which might be representative of pyre structure in terms of the type of wood used (i.e. 'reclaimed' or re-used from another context?), are recorded in the archive, although again it is far from clear which of these objects were burnt and which were not (appendix 1.2). Nails and nail fragments were found among the cremated bone deposits of several cremation burials: S16 (one incomplete and one nail shaft), S17 (four complete) and S24 (unspecified number, 'distorted'). Again, the iron fragment and mineralised wood from the primary container of S13 may be from the pyre structure.

The fact that no instance was recorded where more than one person's remains were represented within a single burial context might suggest either a lack of available diagnostic evidence, that pyre facilities were cleared very thoroughly, or that new pyres were constructed in each case.

The majority of cremated bone fragments in the least disturbed containers appear to be in the 20–50mm range with (on average) slightly less from 10–20mm and less fragments again either smaller that 10mm or larger than 50mm (Anderson 1992, Fig. 8.2). Bone from S18, which would have been protected by its secondary container, an amphora, was much more highly represented in the over 50mm bracket, at 20–25% (ibid.). The latter, as the least disturbed deposit, still provides the most compelling evidence from the site that cremation and collection techniques that produced the material must have involved considerable fragmentation of the skeleton.

The colour of the cremated bone also suggests, in the main, a highly efficient technique that produced a 'pale cream or off-white' colour indicative of high levels of mineralisation in 89.7% of the whole sample (Anderson 1998, 120). It may of course be that the lighter coloured bones were more easily selected during collection from the completed pyre. Anderson's suggestion concerning S13, that '11.6 per cent of the bones were only lightly burnt which argues for either a low firing temperature or a very short period of cremation' (*ibid.*) seems to be over stating the case, considering the potential variability of conditions in any pyre. Similarly, arguments that less oxidisation of certain skeletal elements from S14 and S17 suggests in the former case that 'the cremation was probably of rather short duration…' and in the latter that '(I)t

is possible that a sudden heavy downpour reduced the efficiency of the cremation process…' stretch the evidence. Finally, the survival of intact teeth in burials S14 and S26 suggest that 'the maximum temperature was probably less than 500ºC…' (*ibid.*) in only a part of the pyre, surely. Nevertheless some of the difficulties associated with solid fuel pyre conditions are perhaps represented here.

No indication of diagnostic features of 'pyre goods' in terms of cremation techniques is available. Burnt animal bone was recovered from the cremation deposits of six burials, with some potentially interesting results (appendix 1.2). S10, a 'box burial' from Group S, contains teeth and part of the lower jaw of a pig of unknown age, as well as a bird bone identified as bearing two parallel cut marks (perhaps the result of preparation). Alternatively, burials in Group SE seem to have only pig limb bones. (It is of course important to remember that collection methods may seriously have biased such results).

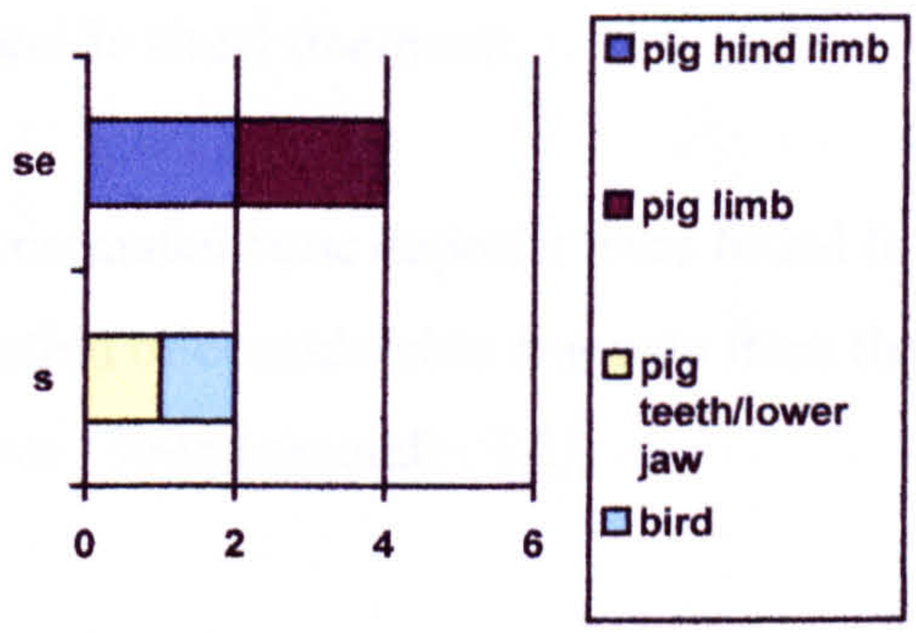

Figure 2.22: comparison of animal pyre goods between Groups SE and S at Each End, Ash

The pig bones of Group SE were found in burials S19 and S14 (these from animals of unknown age), as well as S16 (hind leg of immature animal, under 3.5 years) and S18 (hind leg of immature animal, under two years). It may also be significant that the two burials with immature animals (S16, S18) are adjacent (see figure 2.20) and that the other burials with pig remains (S19, S14) are the most south-westerly of the burials in Group SE. The northern spatial-subgroup feature no burnt animal components (Anderson 1998, 129).

Two cremation burials were found to contain hobnails from footwear (attached to mineralised leather) mixed with the cremated bone in the primary containers (S23; S18, with two and three hobnails respectively), although whether these were burnt is unclear. The burials are from separate spatial sub-groups (N and SE). Hicks mentions one burial including burnt hobnails 'suggesting the deceased may have been burnt wearing boots or shoes' (Hicks 1998, 115), but not which burial. An iron fragment attached to a scrap of mineralised wood was also found within the primary container in S13; again it is unclear whether the fragment has been burnt or not. If found to be burnt, while it is possible that such objects may have been selected and used ceremonially pre-pyre, they can be classed as possible 'pyre goods' (although they may of course have been burnt elsewhere and added during deposition of the remains). If un-burnt, both hobnails and the iron fragment from these burials may of course provide evidence of objects originally being placed above primary containers during deposition, or of secondary rites of some sort. Burnt or not, the rarity of the finds could also be a function of post-pyre collection techniques or post-depositional processes, rather than a specific ritual treatment.

The nine apparently intact cremated bone deposits were found to contain weights of bone consistent with collection of considerable amounts from the pyre, with most above 1000g, and two above 1500g (appendix 1.1).

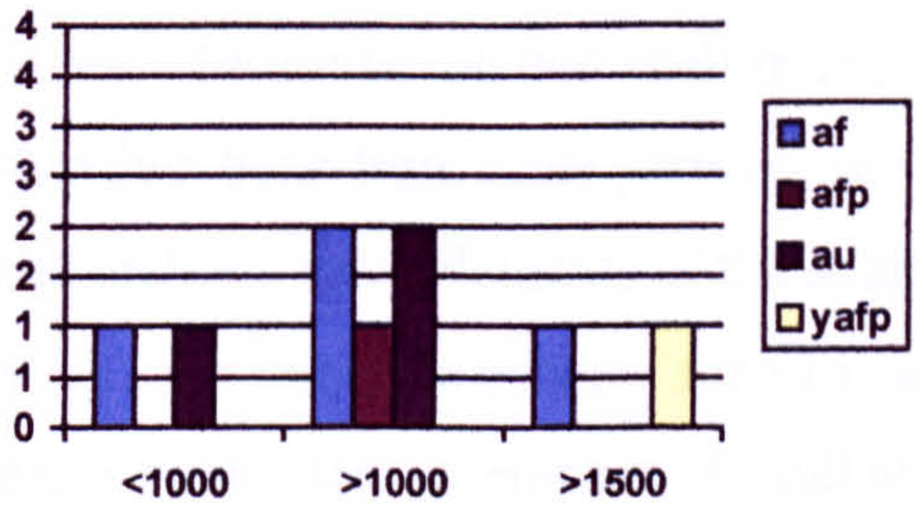

Figure 2.23: comparison of bone weights with sex and age of human remains at Each End, Ash (n= 9)

Burials S26 (adult female: 859g), and especially S16 (adult of unknown age: 642g) are notable for having the least bone, while adjacent burials S4 and S19 have similar amounts of bone (1395g and 1060g respectively), as do S14 (1108g) and S15 (1065g),

also in the south-west corner of Group SE. S13, identified as remains of an adult female had the second highest bone weight (1537g, although one of the least elaborately furnished, see below), and S18 with the most bone, 1959g, which would seem a considerable amount for a young adult female, although again, this was probably the least disturbed sample.

Anderson (1992, 40) refers to McKinley's proposal that the range of skeletal elements that we might expect from the 'average' cremated skeleton is 'approximately' skull= 18.2%/axial= 23.1%/upper limbs= 20.6%/lower limbs= 38.1% (McKinley 1989, 68). From Anderson's point of view a mean average of the proportional representation of skeletal elements from the Each End samples, 22/21/22/35% [6] 'equate closely' with McKinley's projection (Anderson 1992, 40–41).

However, analysis at a higher resolution reveals possibly significant divergences from this 'average' (albeit of twelve deposits in total) can be elucidated, even if we only consider the cases where the bone deposit was apparently intact with considerable amounts of bone identifiable (see Figure 2.24). Such cases include: S18 and S13 which, although the best preserved, seem unusually high in axial elements (the former at the expense of skull, the latter at the expense of lower limbs). Adjacent burials S4 and S19 (where lower limbs appear 'over represented') are also potentially interesting in this regard, perhaps suggesting collection from the 'feet end' of the pyre. On the other hand, burials S15 and S26 appear to best conform to McKinley's expected pattern. It is also worth noting with Anderson that skull fragments are more identifiable at a smaller size than bone from other parts of the skeleton, and this may be why there are more skull and less axial elements of the adult female of S10 than we might expect (1998, 130). This may also account for S16, admittedly a smaller deposit, which seems to have a considerable amount of skull at the expense of axial elements.

[6] My data are derived from Anderson's unpublished graphs in the archive report (1992, Figs. 8.4a; 8.4b), and are therefore to be accepted as approximate. I have rounded these (and the relative percentages below) up to the nearest decimal point.

Burial Number	Spatial sub-group	Weight of sample	Skeletal elements skull/axial/arms/legs
S18	SE	1959g	10/38/18/34
S13	SE	1537g	18/36/18/28
S4	SE	1385g	14/18/18/50
S19	SE	1060g	21/10/18/51
S15	SE	1065g	24/23/19/34
S26	SE	859g	20/22/18/40
S10	S	1234g	34/13/12/41
S16	SE	642g	41/06/19/34

Figure 2.24: skeletal elements of bone deposits at Each End, Ash, in the order in which they are discussed

It is interesting to note that the young adult female of S18 and the adult female of S13 have alternative components to the expected model, and that adjacent burials S4 and S19, both adults of unknown sex, appear to form an adjacent group in this respect (as in others, see below).

An apparent lack of mixing of different human remains within the same cremation deposits suggests that collection was from single rather than communal pyres. The animal remains and other objects interpreted as possible 'pyre goods', if not carefully added either from the pyre or elsewhere, might also suggest a more 'wholesale' method of collection, perhaps involving some form of winnowing or flotation technique as put forward by McKinley (1989, 73). Especially if a 'wholesale' collection method was used, hobnails within S23 and S18 may provide tenuous evidence that footwear was indeed 'worn' by the corpse during cremation of these particular individuals, and/or that bone in these cases was raked and sorted from near the original position of the feet of the deceased (S23 was too disturbed for comparative analysis of skeletal elements, but see figures for the well preserved S18 [Figure 2.24], where the skull actually does appear to be somewhat underrepresented, despite a considerable amount of bone being collected from the pyre; compare also overrepresentation of lower limbs in S4 and S19). The results are interesting but inconclusive.

Deposition

Cremated bone deposits

No burials containing further pyre residues (Brandschuttgräber of either sort) were reported or can be reconstructed; the available evidence suggests that of the fifteen features interpreted as cremation burials twelve contained deposits of sorted bone and no pyre residues. S21 had been too badly damaged for its contents to be known. 'Bedding deposits' in burials of Group SE are reported to have contained flecks of carbon, but this would not seem to qualify the burials as Brandschüttungsgräber (burials including pyre material as well as sorted cremated bone).

The remaining two 'burials' are of interest for being apparently intact and yet containing no cremated bone or other pyre material whatsoever. S22 seems to have been a 'casket burial' with accessory vessels, and so should be considered as possibly being originally deposited with either a very small amount or no cremated remains. S5 in Group S contained only a single coarse ware jar (similar to primary containers in other burials, but also to an almost complete jar found in the ditch surrounding Group SE). This, although originally interpreted as a cremation burial, may also be the remains of a special deposit of some sort (see below), perhaps a secondary deposit related to the box burial S10, which it appears to cut. It is equally possible that an original cremated bone deposit was 'excavated' by burrowing rodents; mole and shrew bones were indeed found within the vessel. If this was originally a cremation burial, some sort of connection of the deceased with that in S10 might still be postulated.

The location of the bone deposits within vessels was investigated by Anderson using computerised tomography, findings being consistent with bone being placed in the bottom of vessels at deposition. Anderson also suggests that vessels were half full of bone when deposited (Anderson 1998, 122). Location of bone deposits within the pits shows a general pattern of variation: (see figure 2.25); those with known secondary containers (S10, S18) were centrally placed (c=central), as well as burials with little or no apparent or surviving accessory objects (S13 and S14).

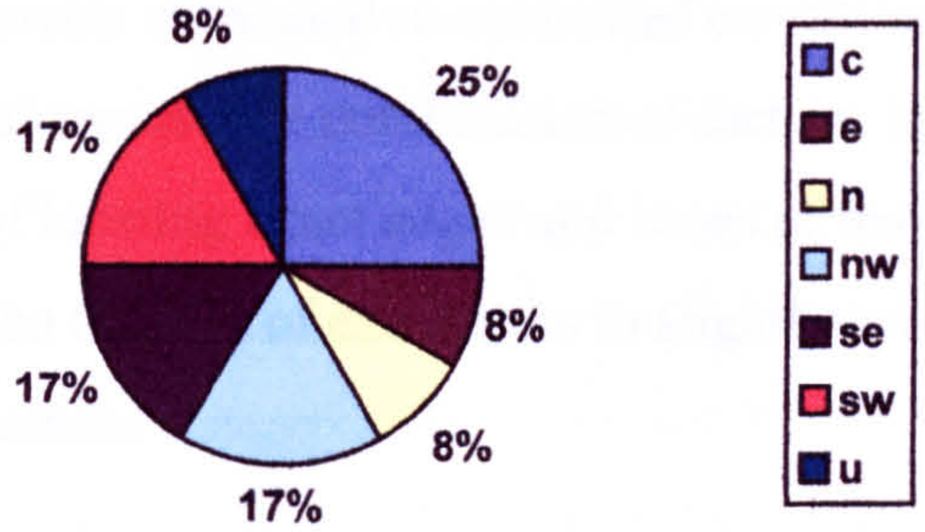

Figure 2.25: location of bone deposits in pits at Each End, Ash (n= 12)

Pit design

Some features of pit design would seem to be worth noting. It is noticeable for example that most pits in Group SE tended to be more than 0.65m in extent, slightly more spacious than those in Group N, for example, which (although two of the four were disturbed) tended to be less than 0.65m in extent. Burials with confirmed secondary containers, the 'box burial' S10 (Group S) and the 'amphora burial' S18 (Group SE), seem to have been designed to fit the secondary container perfectly. This is more difficult to distinguish in the possible 'casket burial' S22 (Group N), as it was not noted as such during excavation. Adjacent burials of adults of unknown sex S4 and S19 noticeably form a group once again, being rectangular and spacious compared with others, although space seems to have been left in the oval pit of S15 to the north of these and especially in S13 at the south-east corner of the group (unless these spaces were once filled by organic contents that have not survived).

The excavator also reports that the burials of Group SE (even the 'amphora burial, S18) were characterised by the inclusion of 'bedding deposits', invariably flecked with 'tiny fragments of charcoal, daub, chalk and flint inclusions', and suggests that these deposits were used to fix contents in an upright position while burials were backfilled (Hicks 1998, 112). An alternative suggestion may be that burials of Group SE were not immediately backfilled, and that the bedding deposits are in fact primary

silting deposits (we might note that probably contemporary deposits within the surrounding ditch and other features also had considerable charcoal and daub inclusions (ibid, 105–108). Perhaps the most likely explanation (given that most of the intact burials with pottery vessels excavated in controlled conditions come from this group) is that these 'deposits' represent a combination of factors, including bioturbation, the difficulty of locating exact edges and bases of features cut into natural brickearth, the need on the part of excavators to slightly 'over-cut' in order to be certain of the extent of features.

Primary containers

Selection of ceramic primary containers (appendix 1.3) would seems to have been a local tradition, used with eleven of the twelve cremation deposits, ('box burial' S10 had either an organic primary container since decomposed, or none at all). The ceramic tradition can be further qualified by the preponderance of jars (see Figure 2.26), which in the main are transitional native coarse ware types and quite uniform. The interesting exception in terms of jar selection here is S15, where the primary container was a double handled, 'honey pot' form, possibly imported from north-west Gaul. S18 used a native coarse ware bowl as its primary container. The general traditions here seem to cut across spatial sub-group as well as sex and age categories, apart from S10 (S); although the other 'burial' in this group, S5, contained no bone and may be a special deposit, it contained another transitional native coarse ware jar.

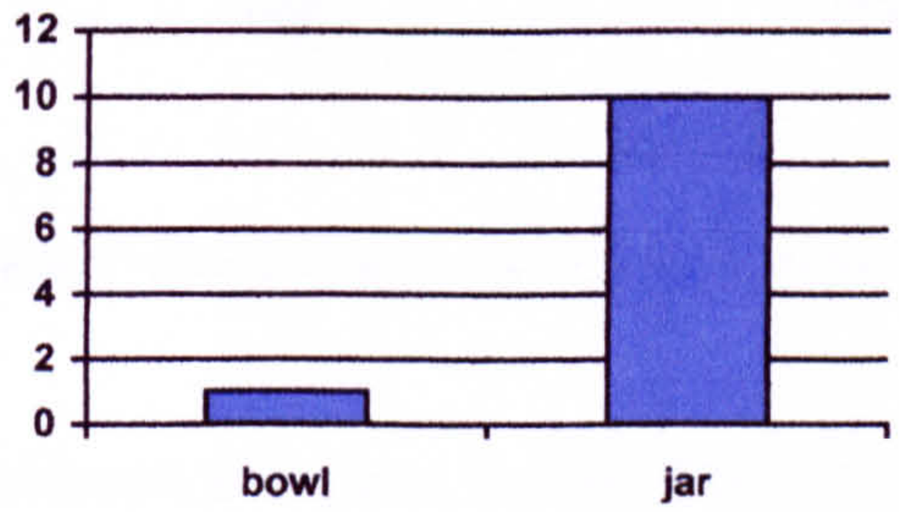

Figure 2.26: types of ceramic primary containers at Each End, Ash (n= 11)

Secondary containers

Three burials can be said to have had secondary containers (appendix 1.4), with possibly one of a different type within each spatial sub-group. S10 in Group S seems originally to have been placed in a box (or perhaps in a shuttered pit?); S18 in Group SE was contained within a modified southern Spanish Dressel 20 amphora, the neck and shoulders forming a 'lid'; S22 in Group N contained no bone but copper alloy objects that may be fittings for a container, including a tumbler lock bolt with four triangular cut outs, and a piece of sheet with a domed rivet; although apparently not recognised during excavation or original analysis, these objects would seem to indicate a possible 'casket burial', albeit apparently devoid of cremated bone (or another special deposit?). All secondary containers would appear to have contained all the objects associated with them.

Accessory vessels

The overall pattern of numbers of accessory vessels (appendix 1.5) deposited in each case is quite varied.

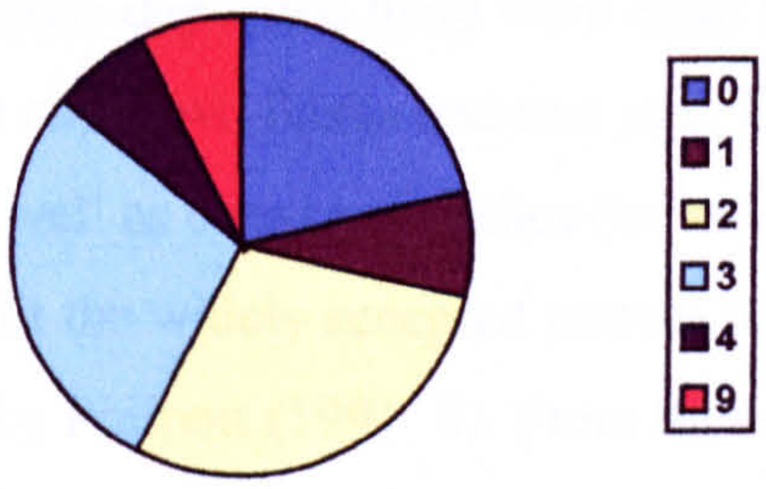

Figure 2.27: variation of numbers of accessory vessels at Each End, Ash (n=14)

Discounting the disturbed burial S21, three burials (S10 and S5 [which may be a special deposit] in Group S and S13 in Group SE) had no accessory vessels. These, along with S14 in Group SE (with one accessory vessel) make up the most southerly burials from the site. Four burials had two accessory vessels (S19 and S15, adjacent to the west in Group SE and S23 in Group N) and four burials (S16, S17, S26, S22, three

from Group SE and one from Group N) had three accessory vessels. The burials with two and three accessory vessels formed the bulk of the sample.

The fact that the majority of burials had between one and three accessory vessels seems to conform to Philpott's general pattern (1991, 8). Special cases from this perspective include burial S24 (N) had four accessory vessels, but by far the most obvious exception is S4 (SE), with a total of nine accessory vessels.

The overall pattern of types of accessory vessel (including samian) is again varied.

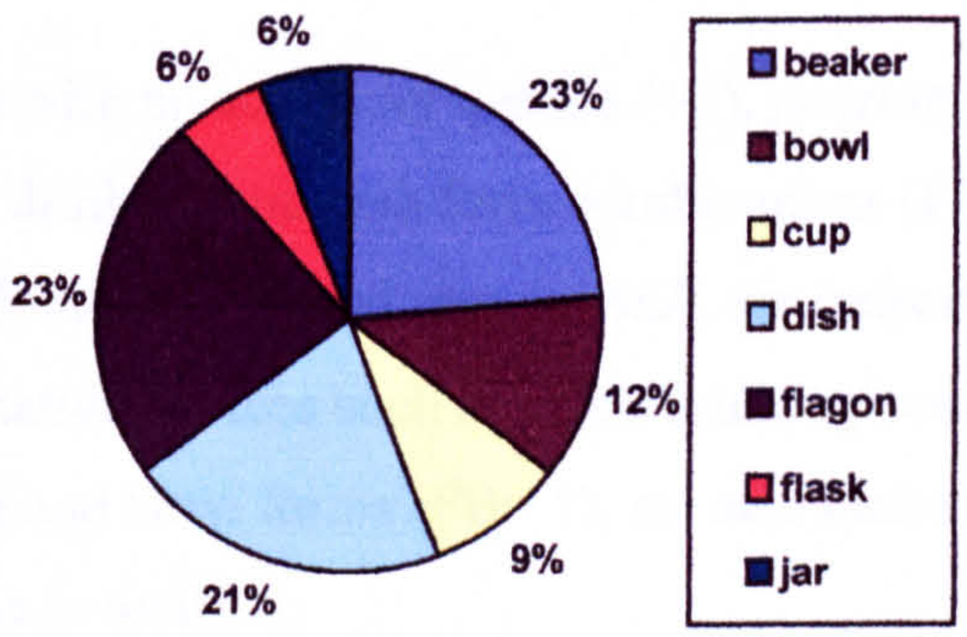

Figure 2.28: overall representation of accessory vessel types at Each End, Ash (n= 34)

Of the total of 34 accessory vessels deposited there were eight flagons, eight beakers, seven dishes, four bowls, three cups, two flasks and two jars. The pattern of flagons (as well as flasks), beakers (as well as cups) and dishes (as well as bowls) predominating would seem to fit the widely accepted pattern for selection of accessory vessels put forward by Philpott (1991, 8). From these figures, local tradition of selection of accessory vessels appears to be based on flagons, beakers and dishes, with some variation.

However, a more qualitative analysis of the combinations of vessel types deposited within each burial reveals a more varied selection of vessel type, with eight separate combinations out of fourteen apparently intact burials.

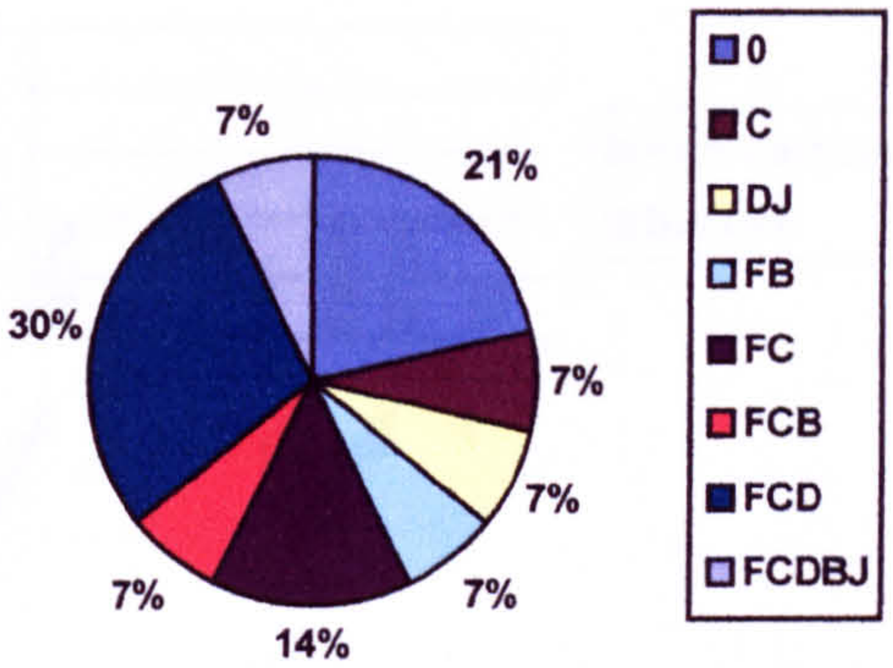

Figure 2.29: variability in accessory vessel combinations at Each End, Ash (n= 14)

Apart from the burials with no accessory vessels (=3), pouring and drinking vessel (FC= 2), and pouring, drinking and dish form combinations (FCD= 4), best conforming to the Philpott model cited above (*ibid*), are indeed among the best represented. But alternative choices such as just a drinking vessel (C =1), dish and jar forms (DJ=1), pouring and bowl forms (FB= 1), etc also make up a significant proportion (five burials in total).

S15 is notable for being one of the two burials on this site to include a native coarse ware jar as an accessory vessel rather than a primary container (cf. nearby S4, below); in the case of S15 a honey pot form was used as the primary container. In both burials with more than three accessory vessels, the FCD combination seems possibly to have formed the basis for further elaboration. In the case of S24 a samian cup was added, perhaps 'reiterating' the drinking vessel form. With the relatively elaborate burial S4 (see Figure 2.30), a structuring principle appears to have been extra deposits of several vessel types, including one native coarse ware jar to concur with the primary container, two flagons, two beakers, two samian dishes), thus effectively 'doubling' the FCD combination. Additional accessory vessels include again a samian cup (cf. S24). The flange rimmed segmental bowl in burial S4 is a unique form for the site.

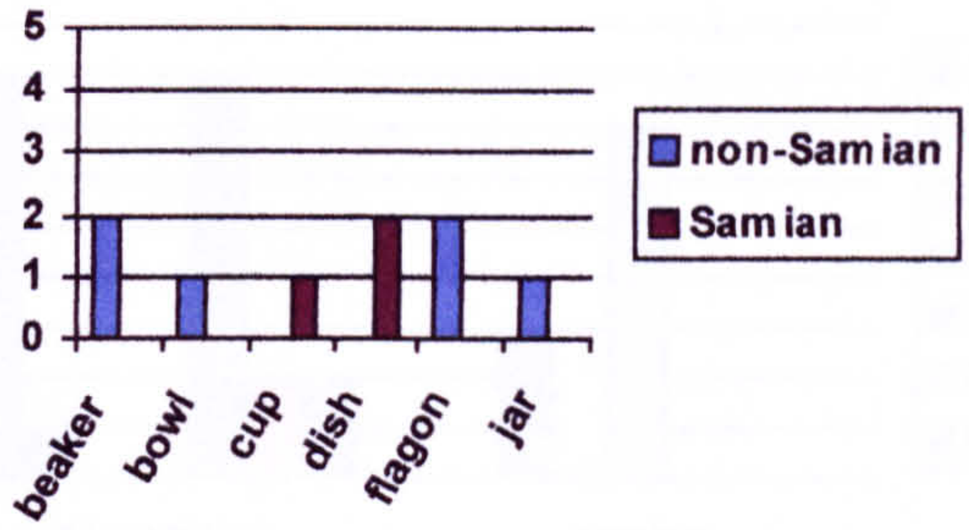

Figure 2.30: numbers and types of accessory vessels in burial S4 at Each End, Ash

The overall proportions of samian and non-samian vessels reveal another aspect of the profile of accessory vessel selection here.

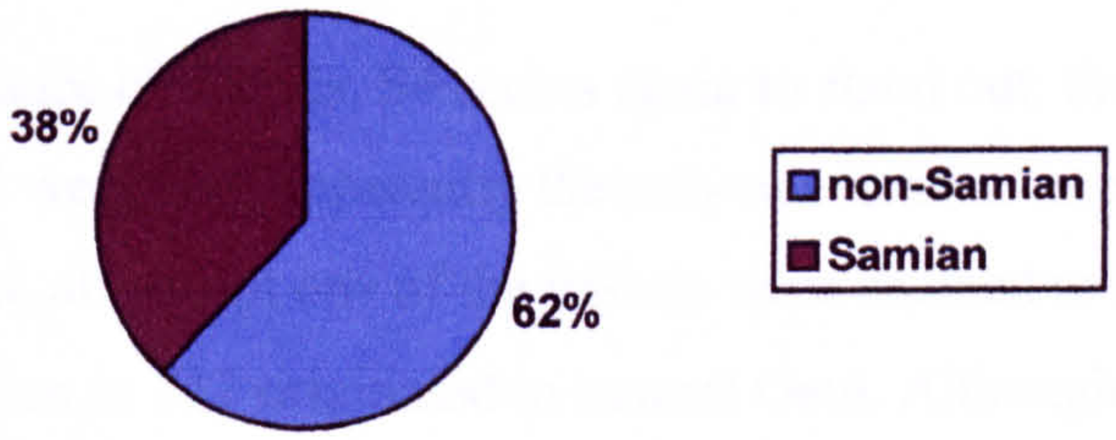

Figure 2.31: overall proportions of samian (= 13) and non-samian (= 21) at Each End, Ash

All of the dishes and cups and most of the bowls (three) are samian. S4, with nine accessory vessels, appears to have a similar pattern of non-samian and samian to that at site level (cf. Figure 2.30, samian = 33%), again suggesting that increase in numbers of types of vessels was an important structuring principle in this particular case, rather than simply relatively more samian vessels.

It is very noticeable that all seven dishes, three of the bowls (the exception being that in burial S4) and all the cups (three) used as accessory vessels at Each End are samian, marking a particular tradition of elaboration through the deposition of these particular types of vessel.

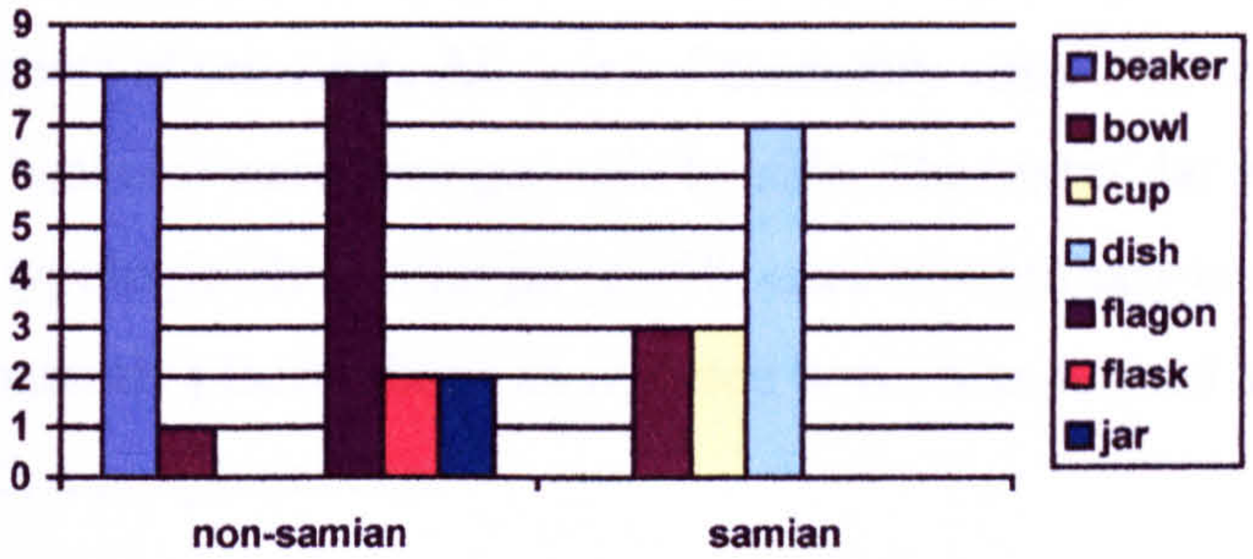

Figure 2.32: non-samian and samian vessel types at Each End, Ash (n= 34)

Some more specialised selection may be evidenced by the flask from S23 which was possibly a miniature vessel, perhaps especially made for mortuary or other ritual contexts, as well as the apparently badly worn beaker in S24, which may have been especially old or at least well used at deposition.

In terms of the provenance of vessels, S4 seems again to stand out; the two beakers deposited in this burial were both apparently the only non-samian imports from the site. In terms of samian, all except one of the vessels were deemed to be from central Gaul, while the exception in S17 originated in eastern Gaul. Although worth noting, this would not seem likely to have been of ritual significance. No instances of special modification of accessory vessels were noted.

Pouring forms were mainly placed to the south-east in Group SE (the pattern somewhat biased by there being two flagons in burial S4, with more flagons in Group N placed to the north, making such vessels in each case more likely to be furthest from the road. However, apart from this slight evidence of a possible site level spatial feature, the sample is not large enough to more than guess at prospective patterns. In the main the location in pits of flagons and flasks, and more especially drinking, dish, jar and bowl forms seems diverse, with no apparent special emphasis on positioning either in terms of particular vessels or in relation to combinations. No pattern of positioning for samian vessels can be seen either.

Accessory vessels in S18 were placed within the secondary container (a modified amphora) along with the primary container (and another accessory, see below). By far

the most spatially complex burial is again S4 where spatial principles appear to align somewhat with aspects of selection. All pairs of accessory vessels (except the possibly imported beakers) were arranged side by side. The 'extra' jar was even placed next to the typologically similar jar [c.260] used as a primary container. Two samian dishes, apparently placed above an inverted bowl, also formed a row of three samian vessels with a peripheral cup.

Other accessories

Other accessories (appendix 1.6) were evidently rarely deposited and can be considered as a further elaboration of deposition at Each End. All burials with other accessories come from Group SE. Burial S19 has the most with footwear (probably intact at the time of burial) and a ceramic lamp of local or relatively local 'Upchurch' manufacture. Adjacent burial S4 was the only other burial to contain intact footwear, again suggesting that these burials have some sort of connection in terms of ritual style. A blown glass, carinated goblet provided further elaboration of burial S18.

Footwear was placed to the north-east and south-east of cremation deposits in burials S19 and S4 respectively. The sample is too small to seek meaningful patterns in this area, but shoes or boots in S4 were placed side by side, apparently pointing out of the pit, towards the south-east; footwear in S19 is too fragmentary for comparison. The glass goblet in S18 was placed within the modified amphora along with accessory vessels.

Combined selection

The codified overview of combined selection of primary and secondary containers, numbers and types of accessory vessels, and numbers and types of other accessories (see figure 1.17, Chapter 4 and notes to appendices) from the fourteen burials (appendix 1.0), where such analysis is possible, emphasises the high degree of diversity among these broadly contemporary late second–early third century burials, particularly in relation to accessory vessels and other accessories. The following chart presents this finding clearly.

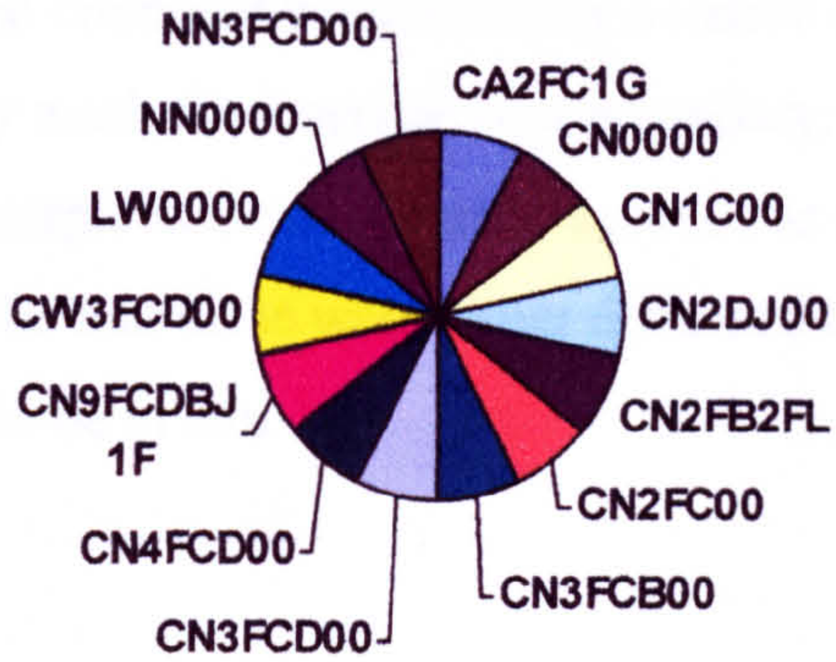

Figure 2.33: overall diversity of combined selection of objects at Each End, Ash (n= 14)

Post-depositional or secondary rites, redeposition

Truncation of burial contexts at Each End has meant that evidence of possible secondary rites focussed on burials is slim. The apparent delineation of Group SE by means of ditches would suggest that the plot was marked in the landscape (although S17 appears to have been cut by one of the gullies, G26), and all burials in the group seem to cluster at one end, or a sub-division of a larger plot bounded by ditch G32 (See Figure 2.20). Burials in Group SE seem to be quite evenly laid out, with no inter-cutting, as do burials in Group N; this suggests some contemporary marking of burial location. In Group S, the 'box burial' S10 appears to respect and even be aligned according to an adjacent inhumation burial (or *vice versa*), again suggesting a marker or bounded space of some sort for deposition.

'Bedding' deposits (appendix 1.7) noted by the excavator in Group SE (if not due to excavation conditions) may in fact result from primary silting of the burials if they were not immediately backfilled after deposition: a novel interpretation. The modified amphora in S18 had a 'lid' formed by the shoulders and neck of the vessel, which may suggest that the contents were to be returned to for whatever reason, or even deposited at different times (this might also be the case with the box in S10 and possible 'casket' in S22). Nails in S17 and S24, as well as piece of iron sheet in S13, if un-burnt, may be evidence of wooden covers for primary containers, or decomposed markers.

'Burial' S5, containing no cremated bone and only a native coarse ware jar, seems to have cut to S10; this may mark the insertion of a secondary, special deposit in relation to S10. An alternative interpretation of features recorded as cremation burials but containing no bone may be that these were either disturbed or redeposited in antiquity. All other burials appear to be in situ.

Profile

Possible site level traditions

It would seem that cremation was essentially a fairly uniform treatment. The overall method of cremation produced mainly well burnt, mineralised bone, suggesting specialised knowledge and skill in carrying out the work; some form of wholesale collection and sorting of cremated remains is also suggested, although careful and specific selection of items from the pyre should not be ruled out. Slight variations in particular cases in terms of the colour and fragmentation of bone, as well as the amount and type of bone collected, should not be over emphasised given both the complexity of the procedure and the paucity of evidence.

A lack of burials with added pyre material (Brandschuttgräber) or alternative deposits of pyre material might be a function of when the site was excavated as much as anything else (carbon in the ditch surrounding Group SE may be of interest here). The majority of burials seem to have been of sorted bone and placed within ceramic primary containers (especially native coarse ware jars) and without secondary containers. A considerable proportion of the burials included FC or FCD combinations of accessory vessels of local or relatively local manufacture; an overall tradition of selecting samian dishes, cups and bowls (mainly from central Gaul) as well as local flagons is also apparent.

The use of 'lids' and therefore the possibility of continued access to burials after initial deposition is clear in S18, and can be suggested for S10, S13 and S22.

Truncation of the site means that the use or not of 'lids' for all other burials is unknown.

Chronological patterns

No chronological patterning of ritual style could be discerned; the cremation burials at Each End represent quite closely dated, if not contemporary rituals, and thus form a tightly controlled group for comparison.

Spatial sub-groups

There is slight evidence of a variation in animal remains from the pyre between the only certain cremation burial of Group S (S10, with pig jaw and teeth and bird) and some of the burials in Group SE (S16, S18, S19, S14; with pig limbs). However, the apparently patterned distribution of 'pyre goods' may well be accidental.

Some patterning in pit design between spatial sub-groups is possible, with those of Group SE appearing larger. Group SE is also apparently characterised by the use of 'bedding deposits' (although alternative explanations such as a delay in backfilling might be suggested). It is noticeable that two of the pits with secondary containers seem to have been designed to 'fit' while the third is unknown in this regard (S18; S10; S22); there appears to be one burial with a secondary container in each spatial sub-group; whether or not this points to an overall structure of cremation burial types in each group is un-testable due to the limits of excavation.

Sex/age groups

No distinct ritual styles relating to sex or age sub-grouping could be delineated. There may be predominance here in the selection of females for cremation and subsequent deposition, although this more likely represents biases either in survival of evidence or in specialist interpretation.

Other groups

It may be significant that cremation deposits within adjacent burials S16 and S19 both specifically contained parts of the hind limbs of immature animals. More convincingly, adjacent pits S4 and S19 seem to be similar in several diverse characteristics, these being the skeletal elements of bone deposited, pit design in terms of size and shape, and the inclusion of footwear at the deposition stage.

Burial level diversity

'Cremation burials' S22 and S5 were apparently deposited with no bone (S5 especially need not be a cremation burial). Exceptions to the suggested primary container tradition of native coarse ware jar include S10 (where bone was either loose or bagged), S18 (bowl) and S15 (imported(?) 'honeypot' form). Burials S10, S18 and possibly S22 appear to be specialised by virtue of their selection of different secondary containers.

Combinations of accessory vessels reveal deviation from 'FCD' patterns in a number of cases. Burial S4 seems particularly elaborated in terms of the number and placement of accessory vessels (as well as provenance, with imported beakers). We might even wonder if the doubling of accessory vessels in this case results from it being a burial associated with two individuals, even though there were no diagnostic features of the bone assemblage suggesting this. Alternatively, two defined groups of mourners might be suggested by such a case.

A unique bowl form (in terms of site assemblage) was also deposited in this burial. S18 and S19 were further specialised by the inclusion of a glass goblet and ceramic lamp respectively. The latter burial, with footwear and lamp seems to have been elaborated in terms of other accessories in particular. It may be particularly significant that, in terms of combined selection of objects for deposition, the burials all have different profiles.

Spatial features are significant in one case in the placement of all objects within a modified amphora (S18), and especially in placing like accessory vessel forms and

footwear side by side in S4. The inversion of the bowl in this burial may have further significance.

Site profile

The overall picture seems to be of a relative uniformity of ritual at the pyre stage, and of an interesting mix of tradition, sub-grouping and specialisation at the deposition stage. Although some diversity is shown in primary containers (at least three deviations from the apparent native jar tradition) and secondary containers (two or three different types where used in the same number of cases), accessory vessels and other accessories form the most obvious context for diversity of burials. Selection of objects seems to have been more significant in this specialisation of ritual than relative placement or modification. Despite the narrow chronology there is a considerable level of diversity.

Local profile

Very little comparative material for Ash is available (appendix 7.0), and what there is almost certainly biased by an interest in certain types of find in the past. The only complete find of a burial at Ash prior to the Each End excavation is an early find of an amphora burial containing burnt bones, as well as pottery vessels including a possible samian dish (VCH 3, Kent 1932, 144; Philpott 1991). Other than this, the eighteenth century antiquarian Brian Faussett seems to report the possibility of a small Roman period cremation cemetery amidst much later inhumations at 'Gilton-Town', to the south-east of Ash (Roach Smith 1856, 34), although few details are reported and there seem to have been no intact burials.

To the east of Ash, an amphora burial has been recorded at Richborough, in the area of the south-west corner of the Stone Fort, and dating to the late second century (phase 2b; Cunliffe 1968, 27). The cremated bone deposit was apparently loose or bagged, and a Drag. 31 dish, a small buff grey bottle and Castor ware hunt cup had also been placed within the amphora. Thus the burial appears quite similar in overall

form to the Each End example, although a narrow necked jar had also been placed outside and adjacent to the secondary container in the Richborough example.

Another cremation burial from the Richborough site (from a later excavation) consisted of a jar as primary container of the cremation deposit and no apparent secondary container; two small (miniature?) Castor ware cups, and two coins (Antoninus Pius and Faustina the Elder) had apparently also been placed within the primary container, with a tile used as a lid (*ibid*).

Contemporary local diversity in terms of primary and secondary containers, as well as accessory vessels, other accessories and choice of lids is therefore apparent.

Other sporadic finds of amphora burials (again few other details are recorded in each case) from Wingham (Dowker 1883, 356; Philpott 1991), Wickhambreaux (VCH 3, Kent 1932, 174; Philpott 1991) and Westbere (Payne 1882; VCH 3, Kent 1932, 174, 175; Philpott 1991) to the west of Ash seem to suggest that a limited number of such burials can be associated with small rural settlements in this area generally, although it should also be remembered that less elaborate or 'impressive' finds associated with amphorae may not have been reported in the past.

This view is supported by the find of a single amphora burial (all contents within amphora, as yet unpublished) at Island Rd, Hersden (again to the west of Ash) among several other cremation burials in a small rural cemetery (Cross and Rady 2002). The cemetery also included an 'early' burial with a ceramic primary container and three accessory vessels. This site is not fully reported as yet, largely as a result of a dispute over developer funding (Paul Bennett, *pers. comm.*), and a further small cemetery from Hersden, discovered during watching brief work on a new gas main in 1994 (Rady 1995), seems not to have been subjected to any detailed post-excavation analysis at all (Jon Rady, *pers. comm.*). The latter cluster of burials appears to have comprised eleven closely arranged burials totaling 21 vessels including dishes and flagons as well as jars as primary containers. Some comparative diversity in numbers and types of accessory vessels is therefore suggested, if not confirmed, in this case.

A picture of small localized cemeteries in the area east of Canterbury might be hypothesized, although evidence remains scarce; the Each End example might therefore be one of many similarly diverse though small-scale cemetery sites in east Kent, perhaps serving small communities or even particular families.

6. Crundale Limeworks, Crundale, near Canterbury

Introduction

This site, situated to the south of the Crundale–Godmersham road and south-west of Canterbury (TR 07404890), was excavated under rescue conditions in 1984 after the owner of the limeworks informed the Canterbury Archaeological Trust that ancient remains had been uncovered as a result of quarrying. Eight cremation burials were located to the north of parallel linear features that may have marked a settlement boundary (see Figure 2.34; the putative settlement would lie further up the slope to the south). No further cremation burials or cremation related features have since been reported from the area immediately to the north which had not yet been stripped when the interim report was published (Bennett 1985). Most of the information used in the following analyses was accessed directly from the site archive (Bennett *et al* 1984) as the site is still to be published in full.

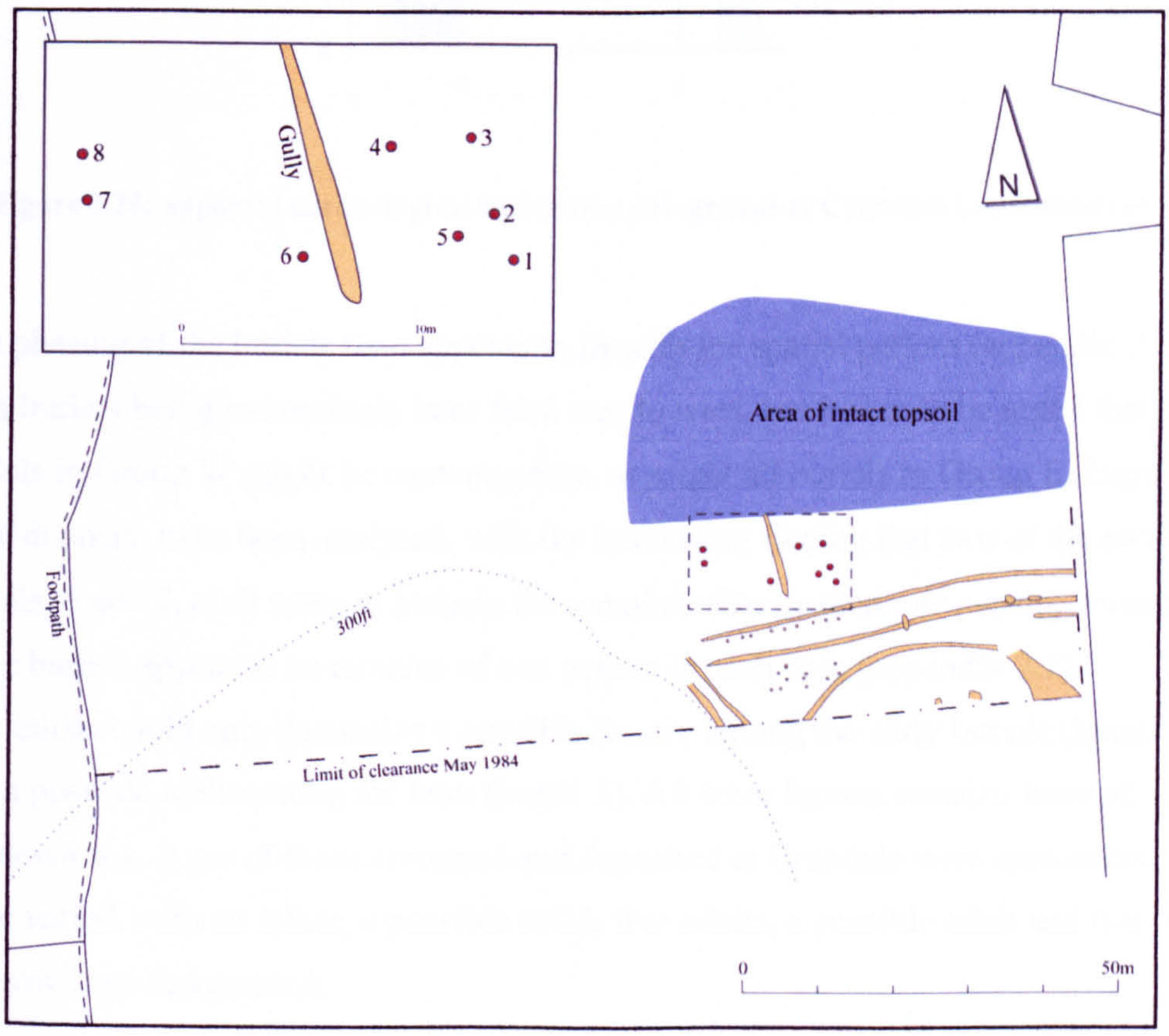

Figure 2.34: Crundale Limeworks: site plan (after Bennett 1984, Fig. 2)

Two possible areas are segregated by a ditch (9); no dating or details of deposits are available for the ditch, but it appears to be in line with the disposition of burials 7 and 8 to the west and 1, 2 and 3 to the east; for the purposes of analysis two groups are initially and tentatively suggested, with five cremation burials (1–5) to the east (Group E) and the other three (6–8) to the west (Group W).

Group W burials are the earliest: burials 7 and 8 (general phase1a) are dated 50–100, and 75–100 respectively; burial 6 (1b) is dated 90–120: followed by Group E burials 4 and 5 (2a) both dated 130–160 and burials 1, 2 and 3 (2b) which are dated 150–200, 180–210 and 150–200).

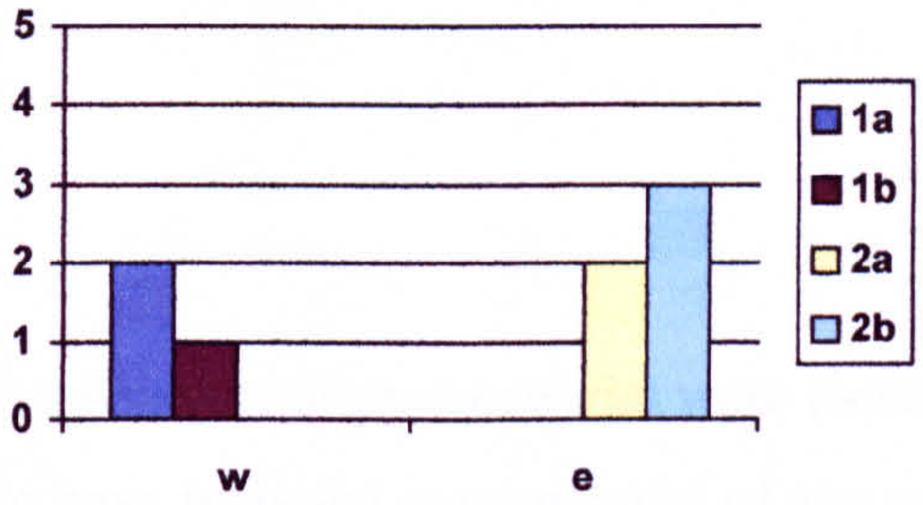

Figure 2.35: apparent chronological and spatial sub-groups at Crundale Limeworks (n= 8)

The phasing of the burials then appears to fit with the spatial pattern (appendix 2.0) with burials being increasingly later from east to west, but it should be noted that all burials in Group W might be contemporary, as might all burials in Group E. Eight bone deposits have been analysed, with the interesting finding that two of the earliest burials, 6 and 7, each seem to include the remains of more than one person, while all other burials appear to be remains of one person in each case (appendix 2.1).

Specialists could only determine a possible female among the early burials (burial 8) and a possible male among the later (burial 3). All other human remains were of unknown sex. Ages of those cremated and deposited at Crundale were apparently quite varied, with an infant, a possible child, five adults, a possible adult and two of unknown age represented.

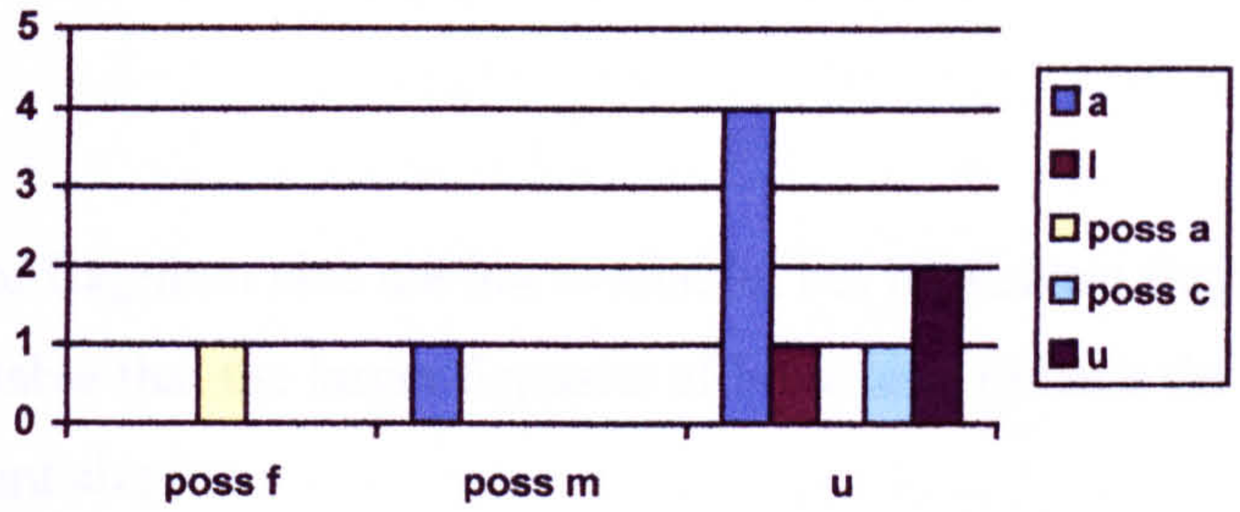

Figure 2.36: sex and age groups of human remains at Crundale Limeworks (n= 10)

The early 'double burials', 6 and 7, were thought to include the remains of two adults of unknown sex and an adult and infant of unknown sex respectively. The possible child was located in burial 4.

Cremation

No pyre sites or alternative deposits of pyre material were located. Bone deposits within burials seem not to have included pyre material of any sort; 'metal' objects from the cremation deposit in burial 1 represent the only possible pyre material recorded from this site, and these are not described as burnt or not (appendix 2.0).

Numbers of individuals in each deposit are interesting in that they may point to a changing method over time; early burials 6 and 7 including the remains of more than one person may indicate a communal burning area, perhaps especially in the case of burial 6, where two adults are represented, and a considerable amount was collected. Alternative explanations can be suggested for infant and child combinations, such as responses to stillbirth or death of mother and child during childbirth, (burial 7); combined cremation may have taken place in both cases, or secondary deposits of bone may have been added to bone already deposited. Whether combined cremation represents some form of relationship in life is another question, and it may be that the second individuals were 'added' to the pyre in each case because it was considered inappropriate (for whatever reason) for them to have their own pyre. It is also possible that more than one cremation burial resulted from a single combined cremation.

Revisiting of burials to add further cremation deposits or even retention of the remains unburied until further remains became 'available' would also result in this evidence.

Overall figures for fragment size are not available, but maximum fragment sizes were recorded. It is notable that the larger deposits of bone tend to have the larger maximum fragment size.

Burial number	Static condition	Max. fragment	Weight of deposit (grams)
1	Truncated	68mm	1250
2	Truncated	90mm	950
3	Intact	96mm	1700
4	Truncated	39mm	425
5	Disturbed	64mm	500
6	Intact	89mm	2000
7	Intact	45mm	144
8	Intact	50mm	349

Figure 2.37: maximum fragment sizes of cremated bone from Crundale Limeworks

Maximum fragment sizes ranging from 68–96mm in the larger deposits of burials 6, 1, 2 and 3 seem to indicate quite standard levels of fragmentation of bone in pyre cremation.

Of particular interest are the small fragment sizes (and amount of bone) for the 'double burial' 7, and adjacent burial 8, despite being apparently intact. However, this may well be a combined collection and depositional factor rather than relating specifically to pyre techniques (see below).

Bone from the earlier burials 6, 7 and 8 in Group W appears to show a uniformly high degree of mineralisation, being mainly white with occasional blue/grey areas. However, bone from burials 4 (equal blue/grey and white fragments) and 5 (mainly blue/grey), the slightly later and most westerly of Group E, seem to be less mineralised, as does a later burial 1 (slightly more white than blue/grey). Burials 2 and 3 are again well burnt. A chronological development of pyre (or collection)

method might be suggested, although the sample is admittedly small, and it may be that Group E burials are from broadly contemporary pyres, perhaps using different methods; linked to this a further suggestion is that the individuals cremated were 'special' in some way, as burial 4 possibly holds the remains of a child, and burial 5 an individual of unknown age or sex.

No diagnostic features of the few possible pyre goods from burial 1 relating to pyre methods were reported. Metallic staining on bone in burial 2 may suggest high temperatures in at least part of the pyre, but this may not result from melted metal, and the bones in question were not identified. 'Animal' bone was apparently recovered from burial 1, but not further identified. On the other hand, this burial also contained burnt oyster shell (amount unspecified). No plant remains were recorded.

Bone weights (appendix 2.1) of the intact and best protected later burials are generally consistent with considerable amounts being collected from the pyre in each case. The large amount of material in a deposit representing two adults from burial 6 (Group W) is of interest in that either extra collection from the pyre of a combined cremation, or collection from two separate pyres for a single deposition would represent a very specific choice of action in this case (later deposition of the second person's remains is an equally fitting explanation).

Various suggestions can be made about Burial 7, the other burial in Group W containing the remains of two people, which (even though apparently intact) only contained 144g. Even allowing for the fact that some of the bone of this burial at least may have been scattered outside the vessel and was perhaps not included by the excavator, this is still a very small amount. Perhaps of particular relevance in this regard is the fact that the bone was contained in a small cup in this case. It might be suggested that only a small amount (of generally small fragment size) was collected because the primary container had already been selected.

It is also possible that this cremation deposit was collected using the same criteria, or even derived from the same pyre as the cremation deposit in the adjacent burial 8, which contained the remains of an adult, possibly female. Here again a comparatively small vessel was used (with some bone being apparently scattered), and here again a

comparatively small amount of bone and fragment sizes seem to be indicated. No details of skeletal elements were available.

While a wholesale collection method is perhaps suggested by 'double' burials 6 and 7, alternative suggestions might be that samples from the same pyre were deposited in burials 7 and 8, and that the deposit in burial 6 was either derived from two pyres burnt at the same time, or represents two separate depositional events. The later burial 1 in Group E contained unknown animal and some oyster remains, which might be from the pyre, and might indicate a wholesale method of collection.
Possibly burnt and 'metal' objects included with the cremated bone in burial 1 might suggest a gravitational method of sorting pyre deposits for bone.

Deposition

Cremated bone deposits

All burials seem to have contained sorted cremated bone, although other types of burial may not have been recognised in the original excavation. In particular we might wonder whether bone found scattered outside primary containers in early burials 7 and 8 might have been mixed with pyre material but not recorded as such. If this were the case such burials might be termed 'Brandschüttungsgräber' (burials of unmixed cremated bone and pyre material). No apparent emphasis was placed on the general location of bone within pits (except perhaps in the more complex sense of the possible scattering of some material in burials 7 and 8).

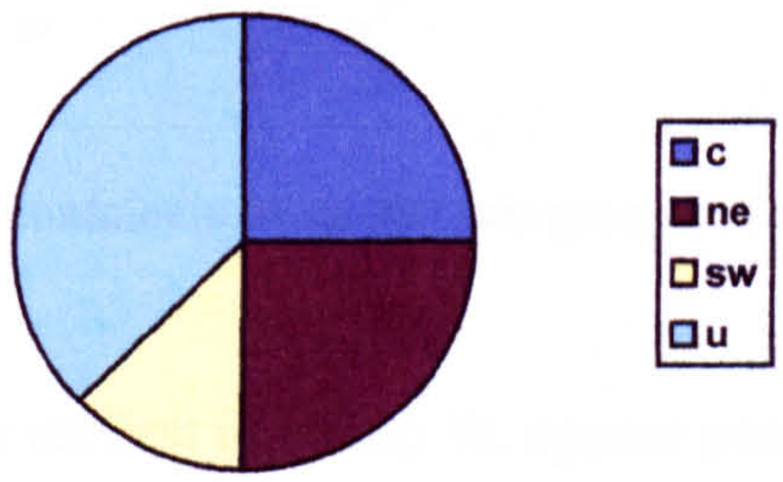

Figure 2.38: overall location of bone deposits in pits at Crundale Limeworks (n= 8)

Pit design

Pits at Crundale generally seem to have been designed in order to fit known burial contents (the cuts being made into chalk makes excavator bias much less likely). In the early burials of Group W, burial 6 containing only two vessels was circular and only approximately 0.40m across, whereas burials 7 and 8 were slightly larger (approximately 0.55m and 0.60m across) as well as being oval and rectangular, apparently in order to fit more vessels and other objects (see below). In Group E, no cut was observed for burial 4, although the three vessels were tightly grouped, and burial 5, with only two vessels, was circular and only just 0.40m. Burials 1 and 2, with all objects placed within the respective amphorae, had been cut to fit the amphorae they contained. In burial 3 however, where a number of other objects had been placed outside the amphora, the pit was apparently rectangular and approximately 1.25m in extent.

Primary containers

A phased selection of primary container by spatial sub-group can be postulated (appendix 2.1; 2.2).

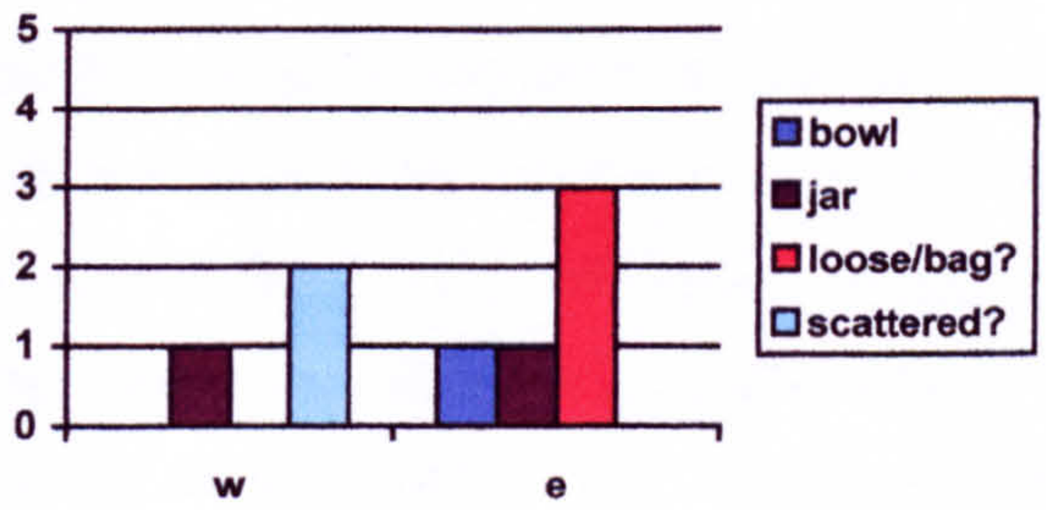

Figure 2.39: selection of primary containers by spatial sub-group at Crundale Limeworks (n= 8)

Burials 7 and 8, apparently the earliest in Group W, appear possibly to have been scattered partly in the primary container, the former a wide mouthed cup and the latter a samian bowl, and just outside in each case. Context sheet (rough) plans and

photographs appear to show these burials intact, but it is also possible that the scattering of bone resulted from post-depositional processes or (even more likely) through discovery during clearance for quarrying.

The scattering of bone in burial 5 (Group E) certainly seems to have resulted from plough and/or machine damage. Despite this, simple use of native ceramic bowl and jar is restricted to burials 4 and 5 respectively, which also possibly form a distinct chronological and/or spatial group. What seem to be the latest burials in Group E also form an obvious group in this respect, as either no primary container, or an organic container such as a bag appears to have been used in these burials (each housed within a secondary container; see below).

The samian bowl used in burial 8 as a primary container was marked with a post-firing graffito, 'M'. The use of a samian vessel as a primary container is rare, but the significance of the 'M' is in its comparison with the same mark on two samian accessory vessels from this site, one also in burial 8, and another in adjacent burial 7.

Secondary containers

A clear pattern can be delineated here, with no secondary containers used on this site until what seem to be the final three burials (1, 2 and 3), which form a row of amphora burials (appendix 2.4). All amphorae are Southern Spanish, Dressel 20. The amphora in burial 1 had been severely truncated, but will have required modification (or to have been already broken) in order to put in some of the accessory objects it contained. The amphorae in burials 2 and 3 both appear to have been carefully broken well above the shoulders. In the case of burial 2 a quern stone cover had possibly been used, while burial 3 has lost all traces of any 'lid'. The latter amphora seems to have been placed in the northwest part of a large rectangular pit. Amphorae in burials 1 and 2 contained all the objects associated with them, while many of the accessories of burial 3 were placed outside the amphora.

Accessory vessels

Overall numbers of non-samian and samian accessory vessels (appendix 2.5) show considerable variation between burials with only two (burials 5 and 6) having the same number (one each).

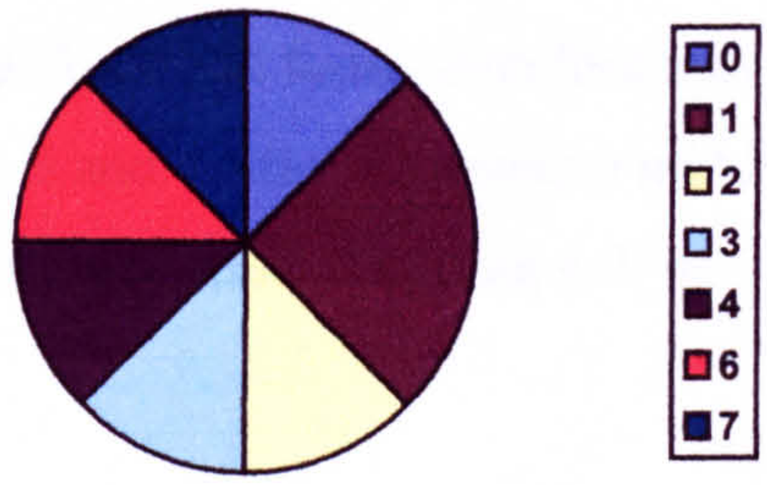

Figure 2.40: numbers of accessory vessels in each burial at Crundale Limeworks (n= 8)

It is again possible to suggest a chronological pattern, with higher numbers of vessels at first, a possible tailing off to very few in a middle period, and a final increase (with one interesting deviation) in the latest period. The earliest (and adjacent) burials 7 and 8 have four and three accessory vessels respectively. Later burials (6, 5 and 4) have one, one and two accessory vessels, and the final group (1, 2 and 3) none, six and seven respectively. If burials in each group are contemporary, a pattern of diversity within groups is represented.

A varied selection of accessory vessel types was deposited.

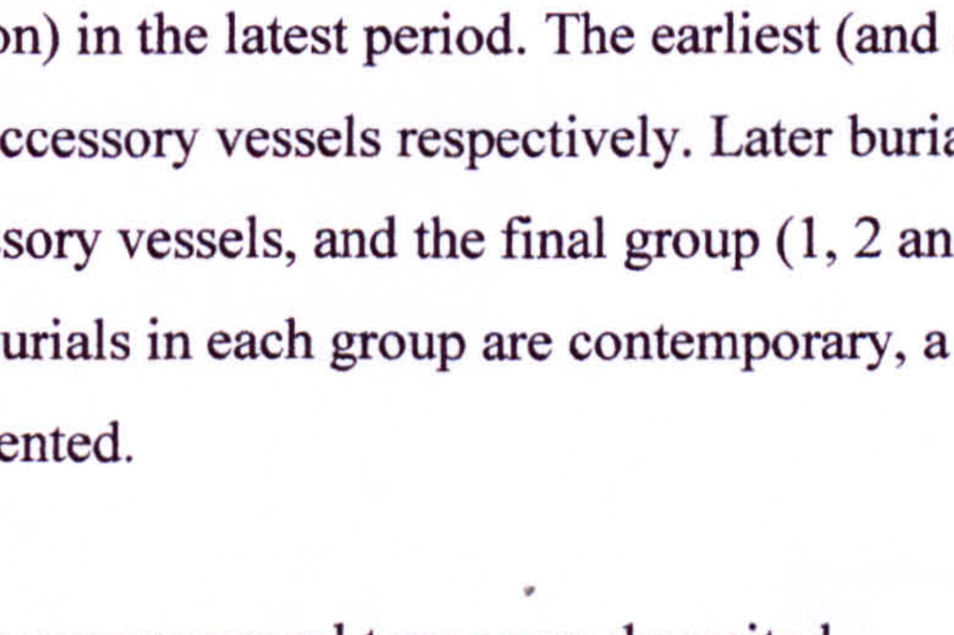

Figure 2.41: overall representation of accessory vessel types at Crundale Limeworks (n= 22)

Of a total of 22 vessels deposited, there were five bowls, five cups, four jars, four dishes, two flagons, one 'dog dish' and one beaker. Flagons and beakers therefore seem under-represented here, with the most widely used accessory vessels being bowls, cups, jars and dishes. This may reflect a greater use of samian forms (see below). Bowls, cups and jars were used throughout the phases. Dishes and especially flagons and a beaker were noticeably used in perhaps the latest burials (flagons in burials 2 and 3, beaker in burial 3). These forms therefore may be seen as additions to an existing tradition. Burials 6, 5 and 4 either represent a middle phase of limitation of accessory vessels, or contemporary diversity in Groups W and E.

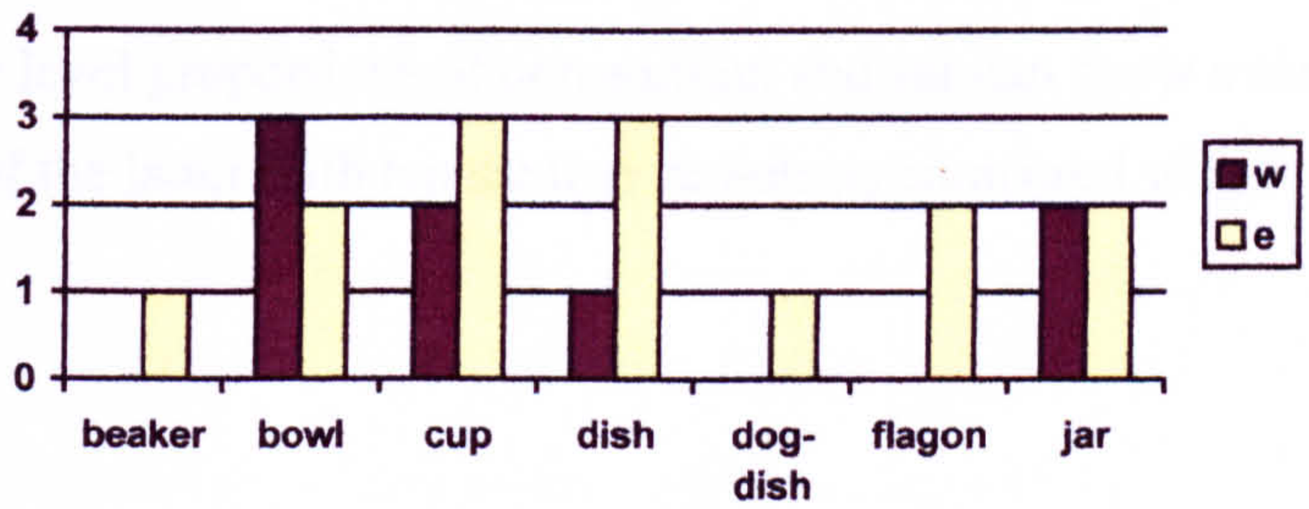

Figure 2.42: accessory vessel types by spatial sub-group at Crundale Limeworks (n= 22)

Combinations of accessory vessels are again varied.

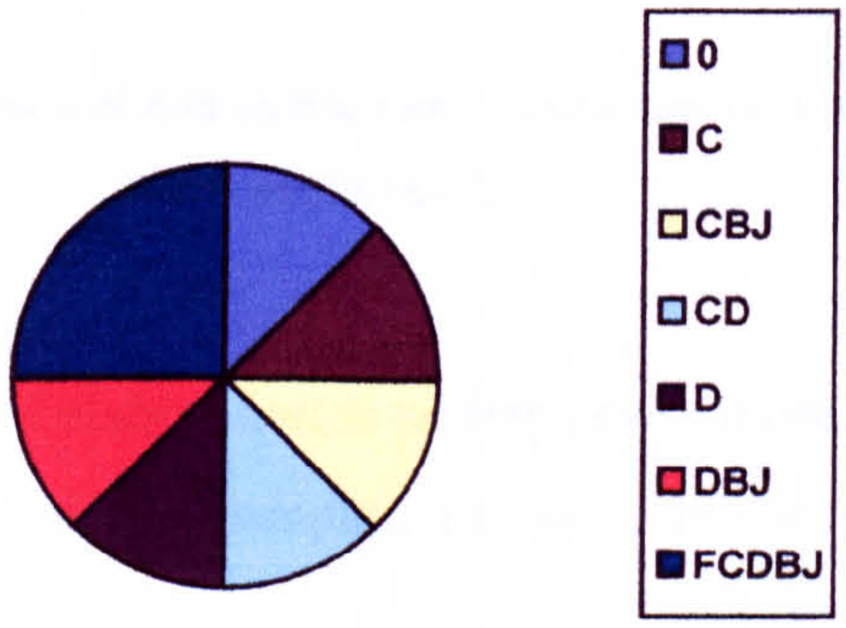

Figure 2.43: variability in accessory vessel combinations at Crundale Limeworks (n= 8)

The pattern again seems to be chronological and/or spatial, with the earliest burials 7 and 8 accounting for CBJ and DBJ combinations, the putative middle period burials 6,

5 and 4 the C, D and CD combinations (again this might represent contemporary diversity within spatial sub-groups), and the possible later burials 1, 2 and 3 with the 0 and FCDBJ combinations. There are still 7 separate combinations in a total of eight burials.

Some specialisation and possible personalisation of types and combinations of accessory vessels is suggested by the single dog-dish deposited with (possibly) the remains of a child in burial 4, while burial 7 contained both Drag. 36 and Drag. 37 'bowls' (the latter decorated by Calvus of La Graufesenque), and contained two cups, one a non samian primary container, the other samian. The inclusion of a decorated samian Drag. 37 bowl in a cremation burial is most unusual.

The assemblage level proportions of non-samian and samian show a sizeable representation of the latter with ten samian vessels as compared with twelve non-samian.

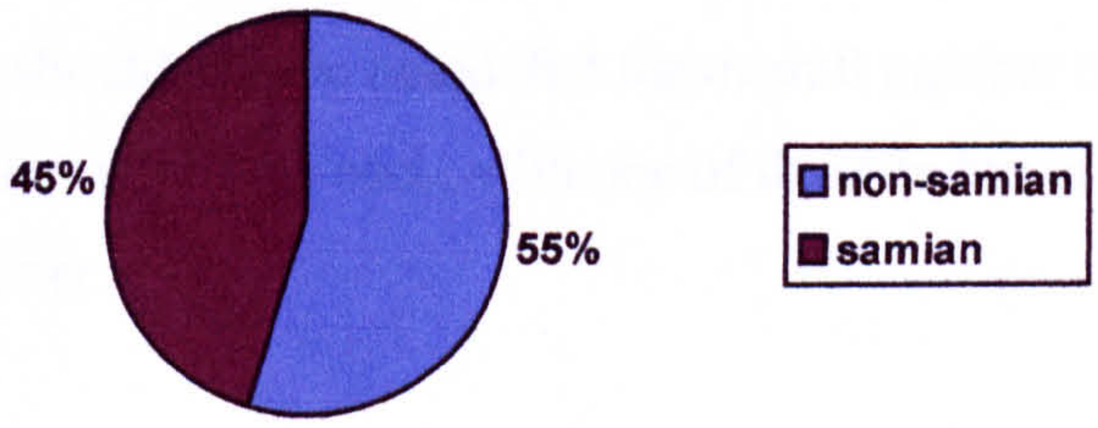

Figure 2.44: overall proportions of non-samian and samian accessory vessels at Crundale Limeworks (n= 22)

The significance of this type of elaboration is perhaps even more noticeable if (albeit tentative) chronology and spatial sub-grouping are taken into account.

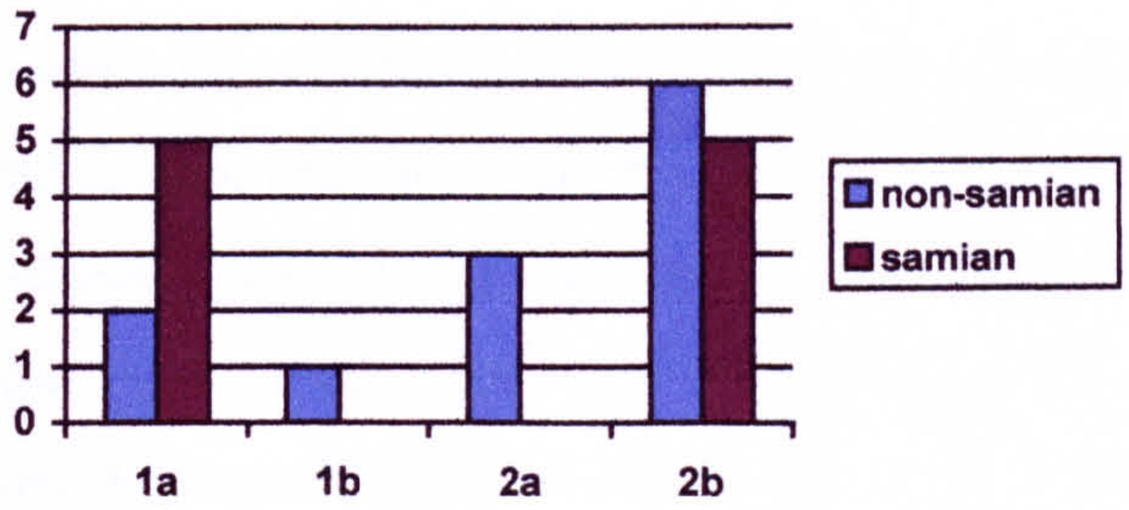

Figure 2.45: phasing of samian and non-samian vessels at Crundale Limeworks

Overall numbers are evidently not enough to be confident of a trend here, but one can be suggested. Where accessory vessels were deposited, what seem to be the earliest burials (7 and 8) used a conspicuously higher proportion of samian than non-samian (three samian: one non-samian and two samian: one non-samian respectively), burials 6, 5 and 4 of the possible middle period (unless these burials are contemporary with the others in their respective spatial sub-groups) contained no samian at all, and the two later burials (2 and 3) that had accessory vessels possibly mark a return to samian vessels as an elaboration (two samian: three non-samian and three samian: three non-samian respectively). It should also be noted that the overall number of samian vessels in burials 7 and 8 were equal at three each, with one of those in burial 8 being partly used as a primary container.

Samian dominated the bowl and dish forms, while non-samian cups formed an interesting part of the overall selection profile, suggesting a local or site-level propensity to use these items.

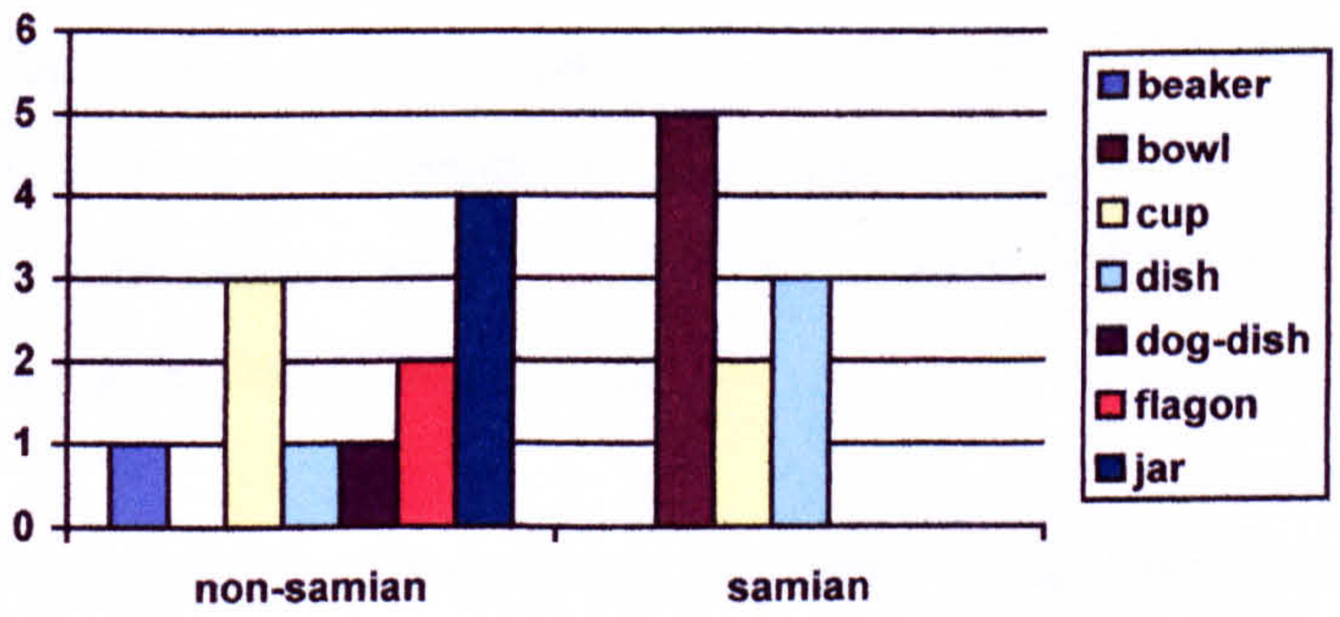

Figure 2.46: non-samian and samian vessel types at Crundale Limeworks (n= 22)

A cup from burial 2 was marked with a graffito 'X' on its girth, and had had a pitch like substance applied to neck and rim, whether this relates to selection or ritual modification of the object is unknowable (although microscopic analysis of the pitch like substance may have yielded diagnostic results in this area). Graffiti on accessory vessels in burials 7 and 8 are particularly interesting. In burial 8 the samian dish (Dr 15/17) was marked with the graffito 'M' on its base, along with the primary container, a samian 'bowl' (Dr 35; although this form usually described as a cup, Steve Willis, *pers. comm.*). In adjacent burial 7 the 'M' was found on the base of another samian vessel, a bowl (Dr 36). The graffiti are more likely to relate to selection than to ritual modification.

The non-samian vessels all appear to have been of local manufacture. The early samian vessels originated in southern Gaul, and the later mainly from central Gaul, with one dish from east Gaul (burial 3); this ties in with availability and provenance of samian at different times (see de la Bédoyère 1988).

Only bowls and jars were included in enough burials and in high enough numbers for meaningful (if limited) comparison in terms of spatial features; diverse location for these vessels seems to show that orientation of these objects in the pit was not of any particular significance.

The three samian accessory vessels in early burial 7 (Group W) are noticeably grouped towards the south-east end of the pit, and the three samian vessels in adjacent burial 8 (i.e. including one primary container) are also grouped (no north arrow on plan or photo to indicate location in pit). Samian vessels in the later burial 3 (Group E) seem also to have been grouped (perhaps as a coincidence, or perhaps indicating some continuity of this spatial feature), congregating in the east of the pit along with other accessories. The samian cup in burial 3 had been placed on the samian dish: again suggesting a grouping of these vessels.

Burials 2 and 3 are markedly different from each other in one respect, with the accessory vessels of burial 2 all being placed within the secondary container (it would appear from photographs that these were removed prior to lifting of the amphora

during excavation, and their relative positions were not planned), and those of the burial 3 all being placed outside the secondary container.

Other accessories

Other accessories (appendix 2.6), particularly in the later burials, seem to have been almost as significant (and in the case of burial 1 more important) than accessory vessels. The earliest use of another accessory is in burial 7, where a hand mirror was included. No other accessories were included in adjacent burial 8 or the central (and possibly middle period) burials 6, 5 and 4. Burials 1, 2 and 3 seem to mark a return to or a particular application of this form of elaboration. All three contained footwear apparently intact at the time of burial. Triangular and square perforated bone objects (perhaps veneers from boxes) were found in burials 2 and 3. Whether these are derived from the same object or type of object is unknown. Also within burials 2 and 3 were small glass vessels, a free blown bluish-green jug and a free blown colourless beaker respectively.

Burials 3 and 1 seem to have been further elaborated in this area. Burial 3 contained an iron stylus with copper alloy details, an iron knife, and another copper alloy object, possibly a pin. But it was burial 1 that was especially elaborated in this fashion, containing, as well as the hobnailed footwear already mentioned, at least 9 other accessories (although neither the bone objects or glass vessels typical of adjacent burials 2 and 3 were present), which are worth listing in full.

Type	Small find Number	Material	Description
Brooch	16	cu	Enameled, circular, ornate, probably continental
Brooch	49	cu	Rectangular, enameled, probably Romano-British
Small box	1	cu	Small cylindrical, inscribed 'from the workshop of Socra', ornate
Mesh rings	4–13	cu	In close proximity, some fragments, 4 round section with 3 with overlapping ends secured with small fe rivet
Fragments	14–15	cu	Sheet, 2 fragments
Bead(s)	16–22	g	Mainly globular

Hobnails	18–20	fe	As well as mineralized leather boot remains in situ against edge of amphora base
Ring shaped object and fittings	Various	ag	Various silver pieces of unclear position
Nails and fitting	Various	fe	Unknown

Figure 2.47: other accessories in burial 1 at Crundale Limeworks

Quite apart from the sheer number of objects, and the intriguing unidentifiable objects here, the inclusion of two enamelled brooches is of interest (one of these lay on top of the mass of cremated bone, and may have originally been used to fasten an organic container), glass beads, and the small copper alloy box of unknown function especially possibly mark a burial that has been highly personalised through selection of other accessories.

The mirror in early burial 7, an item originally imported from the Lower Rhine area, had possibly either lost its handle prior to selection, or was perhaps modified as part of the ritual sequence. The two brooches from burial 1 are both enamelled but one appears to be an import, while the other is apparently of Romano-British origin. The small copper alloy box, inscribed 'from the workshop of Socra' was probably also an import. Several of the other accessories from later burials 1, 2 and 3 may also have been modified, but were apparently not in good enough condition for this type of analysis.

The mirror in burial 7 was placed at the extreme south-east of the pit, separated from cremated bone and non-samian vessels by the grouped samian. All the other accessories of burials 1 and 2 were placed within the amphorae used as secondary containers, whereas those in burial 3 seem to have been placed outside the amphora, emphasising the pattern of accessory vessels already seen in burials 2 and 3. Footwear in burials 1 and 2 were placed within the secondary container (and apparently on top of the bone) whereas two shoes were placed outside and to the north-east of the amphora in adjacent burial 3, toes pointing out of the pit. Triangular and square perforated bone objects (in the former case within the secondary container with the bone, in the latter within an accessory jar, these may be remnants of biers burnt on the

pyre, see Cool 2004a) and small glass vessels (the jug in burial 2 within the amphora, the beaker of burial 3 next to the samian group in the east of the pit). The location of unique items of burial 3 (stylus, knife and possible pin) was not recorded, but at least one of the objects again appears to be separate from the cremated bone, to the far north-east of the cut.

Combined selection

A comparison of combined selection (see figure 1.17, Chapter 4 and notes to appendices) of primary and secondary containers, accessory vessels and other accessories (appendix 2.0) appears to demonstrate a spatial and/or chronological variability at Crundale, as relatively complex burials in phase 1a (west) give way to apparently relatively 'simple' profiles in phases 1b and 2a (central) and finally to the seemingly characteristic but still varied selection of the eastern probably latest group of amphora burials. As in the Each End examples (see above), despite the low numbers involved, the following chart serves to clarify this overall picture of diversity.

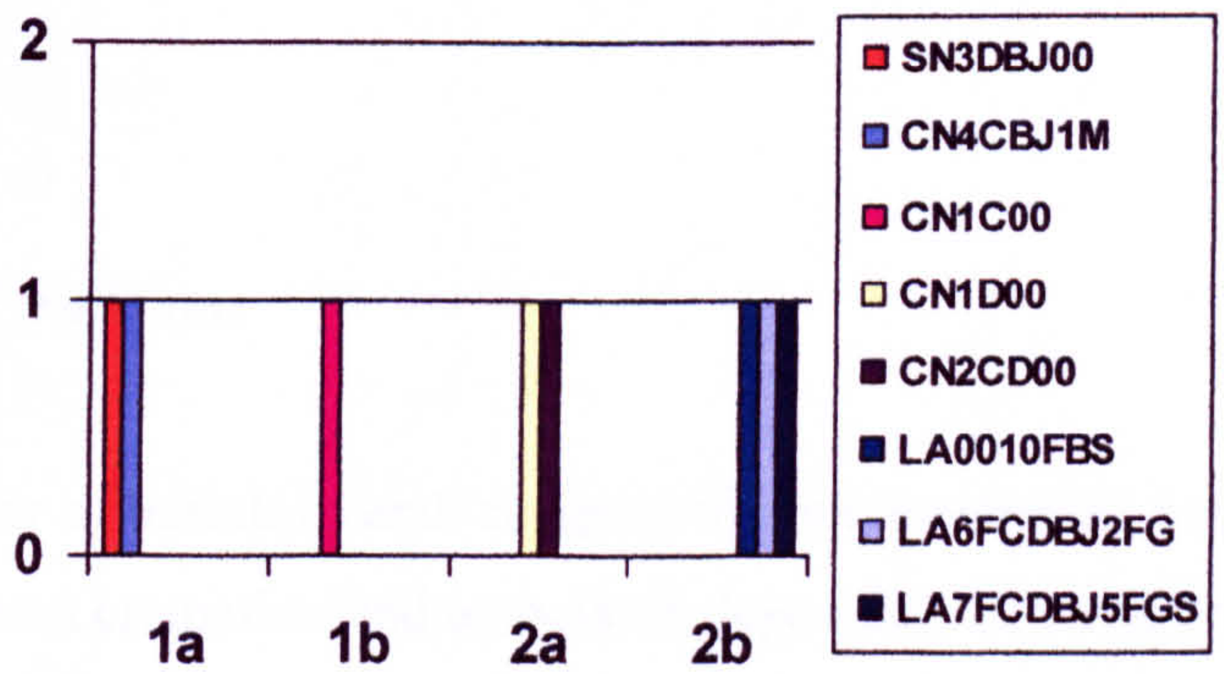

Figure 2.48: diversity of combined selection at Crundale Limeworks, phases 1a–2b (n= 8)

Post-depositional or secondary rites, redeposition

Overall truncation of the site has again removed most sources of evidence for continued used of burials once deposited. A lack of inter-cutting of burials, and indeed quite an obvious pattern of layout and 'respect' for earlier as well as broadly contemporary features, suggests that some form of continued access to burials after

deposition was possible, perhaps through burial markers. Most of the burials (1, 2, 3, 5, 6(?), 8) included nails and unidentified metal objects in backfill that may have been derived from markers or wooden covers.

Inclusion of more than one individual in each of burials 7 and 6 might result from revisiting the burial and further deposition there; this would seem more reasonable explanation for burial 6, where a considerable amount of bone representing two adults had been deposited, although alternative interpretations are also viable.

The use of modified amphorae in burials 1, 2 and 3 would almost certainly have allowed continued access to the burials if 'lids' themselves were accessible; the probable use of a quern stone for this purpose in burial 2 (appendix 2.7) is an interesting replacement of the upper part of the amphora, unless the amphora in question was already broken when selected for deposition. We might wonder whether continued access to the burials might have allowed continued deposition or removal of objects. This is especially relevant to burials 1 and 2, where all accessories were contained within the amphora.

Profile

Possible site level traditions

The limited number of burials overall suggests that we are dealing here with a fairly small group to whom cremation and associated deposition was available over time, perhaps confined to particular status groups associated with a nearby small rural settlement. The cremated bone all appears to have been sorted from pyre material (once again it is important to remember that at the time of excavation Brandschuttgräber and the like are unlikely to have been recognised). Beyond the deposition of sorted bone, there is little uniformity in the evidence of cremation or deposition to suggest that any tradition was rigidly adhered to in all cases over time. If spatial sub-groups represent two phases (with contemporary distinctions within those phases), we can say that a certain group of burials in each phase was elaborated in terms of accessory vessels: the number and provenance of vessels (especially in terms

of samian) in burials 7 and 8 as compared with burial 6, for example, or the similar situation as regards burials 2, 3, 4 and 5. We might also suggest that an early propensity to use bowl and jar forms in burials 7 and 8 was apparently maintained if elaborated in later burials 2 and 3.

While the use of amphorae in later burials (1, 2 and 3) certainly suggests the use of lids and possible continued access to burials, truncation has meant that this is an unknown factor for all other burials on the site.

Chronological patterns

As has been noted throughout, the phasing of the burials suggests a chronological pattern to the rituals which is also reflected in the spatial pattern, although some overlap of date ranges should also be taken into account (see below for alternative suggestions). If the consistently limited numbers of burials per phase are taken into account, we might wonder if the respective phases correlate with generations of particular occupants of an as yet unknown settlement nearby, to whom the rite of cremation and associated deposition was particularly available or of whom such ceremonies were expected.

The colour of cremated bone seems to suggest a phasing of cremation and/or collection method from fully mineralised bone in the earliest burials (7 and 8) of Group W to less fully mineralised in possible middle period of the central burials at the edges of Group W and E (6, 5 and 4), and a later return to fully mineralised bone in burials 2 and 3. Burial 1, with slightly more off-white bone than blue/grey bone, may be the earliest of the later burials. This picture of an overall chronological pattern might be seen to be endorsed by the depositional profiles, particularly in the use of amphorae in the apparently latest three burials.

Spatial sub-groups

Putative spatial sub-groups W and E west and east of ditch 9 certainly seem to correspond with the chronological pattern outlined above, with a possible middle period group comprising burials 6, 5 and 4 either side of the ditch (although the latter

feature may not be connected with the cremation burials at all, of course). In terms of possible secondary rites, the final group of amphorae (burials 1, 2, and 3) would appear to have allowed greater ease of continued access to remains.

However, if all burials of Group W are contemporary, and all burials of Group E are contemporary, diverse styles within spatial sub-groups are indicated.

Sex/age groups

Little information about the sex and age of individuals is available, but the fact that burial 8 has remains of a possible female and adjacent burial 7 includes the remains of an infant might be significant, as these burials share several other characteristics (see below). The sex or age of burial 5 could not be identified, but burial 4 appeared to hold the remains of a child. Both burials might be contemporary with roughly adjacent amphora burials 1 and 3, and this may have implications for our interpretation as to why they were apparently much more sparsely furnished than those burials. Finally, we might wonder if burial 3 was specialised by accessories being placed outside the secondary container as a result of its possibly containing male remains, perhaps in 'gendered' contrast with burials 1 and 2, where all accessories were placed within. Is the lack of accessory vessels in favour of other accessories in burial 1 an alternative expression of the gender of the deceased therein?

Other groups

Adjacent burials 7 and 8 seem to be linked in a series of characteristics, including the inclusion of samian vessels with the graffito 'M'. Burials 1, 2 and 3 are obviously grouped in terms of the primary and secondary container, and the inclusion of footwear. Adjacent burials 2 and 3 share further characteristics in terms of selection of other accessories, while 1 and 2 are more alike in that other accessories were placed within the amphora.

Burial level diversity

If overall combined selection of contents for each burial is taken into account (let alone modification and complex spatial relationships) all the burials are unique and would therefore appear to be specialised in some way. The placing of a mirror in burial 7 is a unique characteristic for the site. The same could be said for the use of a cup as a primary container in this burial or inclusion of a Drag. 37 bowl. Again, the use of a samian bowl as a primary container in burial 8 is not 'traditional' at site level, although an overall lack of tradition at site level in this respect should also be recognised.

The relationship either in life or mortuary ritual between the two adults represented by burial 6 is intriguing: the fact that no accessories at all were included makes this 'double burial' especially 'anonymous'. Combinations of accessory vessels show considerable diversity, with 7 different combinations from 8 burials. The dog-dish used as an accessory in burial 4 (possibly that of a child) is unique for the site, but the burial that particularly stands out as highly personalised is burial 1, with a complete lack of accessory vessels, and an array of other accessories. Some variation in selection of other accessories, but more particularly the spatial arrangement of objects, serves to diversify burials 2 and 3. Most significantly, all the burials have different profiles in terms of combination of objects selected for deposition.

Site profile

The overall profile seems to be of a possible chronological development of cremation method, although some contemporary diversity of methods or cremation and collection based on other (perhaps social) factors can also be suggested. An understanding of how the local deposition profile at Crundale articulates with wider trends will be necessary before levels of local tradition and possible personalisation can be more confidently suggested. However, even if strictly localised or more regional chronological patterning is accepted as an influence, considerable diversity and therefore perhaps personalisation would seem to be evident throughout, particularly in the area of selection and combination of accessory vessels and other accessories (and latterly in the spatial arrangements of burials).

Local profile

A comparison with earlier discoveries and local sites (appendix 7.1) seems to indicate further diversity, particularly in terms of burial level combinations of objects and complex spatial features, as well as some interesting patterns.

The location of Fausset's 1757 discovery of eleven cremation burials (as well as a number of inhumations) on 'Tremworth Down', Crundale (Roach Smith 1856) is marked on the 1908 Ordnance Survey map on rising ground to the south of 'Trimworth Manor' (Ordnance Survey, Kent. 10th Ed. 1908, Sheet 55 NE). Being situated therefore barely a kilometre to the west of Crundale Limeworks, on the next high ground, the burials described by Fausset offer the most significant local material for comparison.

All seem to have used ceramic primary containers (mainly jars forms) and no secondary containers are indicated in the report. A diverse range of types and numbers of accessory vessels was present, including what seem to have been samian dishes (described as 'patera'), flagons and beakers, as well as more specialist vessels such as the miniature bottle form that Faussett calls 'lachrymatory' in burials 10 and 21 (the latter found in the primary container of that burial). One burial (burial 9) contained a bronze fibula and knife in the primary container among the bones.

The possibility of at least some burials being 'Brandschuttgräber' of some sort is once again suggested by Fausett's repeated descriptions of cremation deposits as mixtures of bone, ash, 'black earth' and 'wood-coals' (i.e. charcoal). A piece of apparently cremated buck's horn mixed with one deposit is also interesting in this regard.

Another interesting note by Faussett is of a 'blackish wax' substance apparently applied as an adhesive to the rim of a damaged primary container from his burial 6, remarkably reminiscent of the 'pitch-like' substance applied to the neck and rim of the cup in burial 2 at Crundale Limeworks (above), although the significance of this correlation is unknown. It is worth noting that Faussett conducted a form of chemical analysis on the deposit he recovered: 'I since put a very small piece of this wax upon

a hot iron, and it immediately burst into a flame, the smoke of which gave a very strong and agreeable smell, not much unlike mastick...' (*ibid*, 184).

Perhaps most striking is the fact that three of the cremation burials (4, 9 and 10) described by Faussett contained samian dishes that had been inscribed with an 'x' graffito, a feature also noted in the case of the cup from Crundale Limeworks burial 2 (three inhumations from Tremworth Down also have this feature); it will be remembered that samian vessels from burials 7 and 8 from the latter site were also apparently marked, but with the letter 'M'. Moreover, of the samian dishes from Tremworth Down (burial 9) had the grafitto 'SACRINA' marked on its base. There would certainly seem to be some suggestion of a localised tradition of marking of vessels here, perhaps linked with ownership; whether this is merely associated with the context of the living, or specifically funerary in nature is obviously another question.

Another early discovery, less precisely located in 'Godmersham' (not more than a kilometre further west?) in 1678 (VCH 3 Kent 1932, 151; SMR No. 3858), was possibly an amphora burial (a 'large urn') containing a 'small inscribed urn' as well as a 'shallow earthen pan'. The fact that there is another reference to an inscription here is remarkable. The burial was apparently sealed with a large flat stone and packed around with flints (once again therefore, apparently different arrangements as compared with the Crundale examples).

More recent local finds include a burial with a jar as primary container placed on a dish at 'Julliberries Grave', Chilham (Jessup 1939), and a phase 1a burial from the upper fills of a disused and backfilled ancient quarry at St. Augustine's, Chartham (Rady 1999). The latter consisted of 574g of cremated remains (judged to be that of an older adult female) contained within a ceramic jar with flagon and dish as accessory vessels. The burial may have been disturbed and redeposited during quarrying.

7. Cranmer House, London Road, Canterbury

Introduction

A number of excavations of various sorts over the past 150 years or so have revealed either a single large Romano-British cemetery or a number of associated cemetery plots in the area immediately to the south of London Road and to the south-west of St. Dunstan's Church, Canterbury, approximately 0.5 km to the north-west of the medieval walled city (Figure 2.49). This analysis focuses on the two most recent, related and extensive sets of data from the north-west of this area, these being Cranmer House, London Road (rescued 1982) and St Dunstan's Terrace (evaluated 2000/ excavated 2001–2002, see Chapter 8); these archaeological sites are approximately adjacent (the modern plots adjoin, see Figure 2.50) and would appear to have collected information from the same Romano-British cemetery or burial plot. The sites lie possibly at the north-western limit of the cemetery, on rising ground some overlooking the location of the Roman town of *Durovernum Cantiacorum*, and bounded to the north-west by a Roman road.

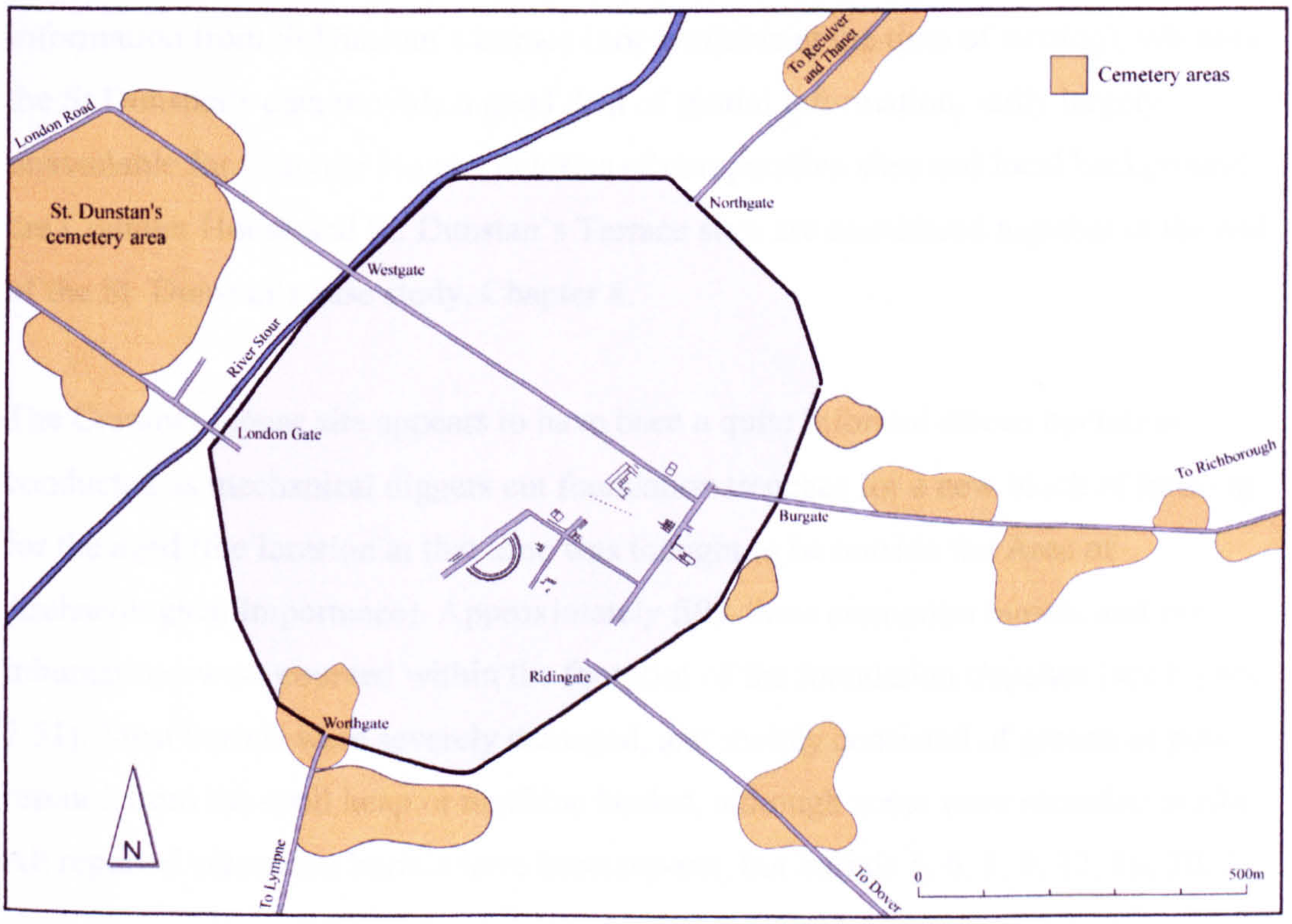

Figure 2.49: St. Dunstan's cemetery in relation to Roman Canterbury

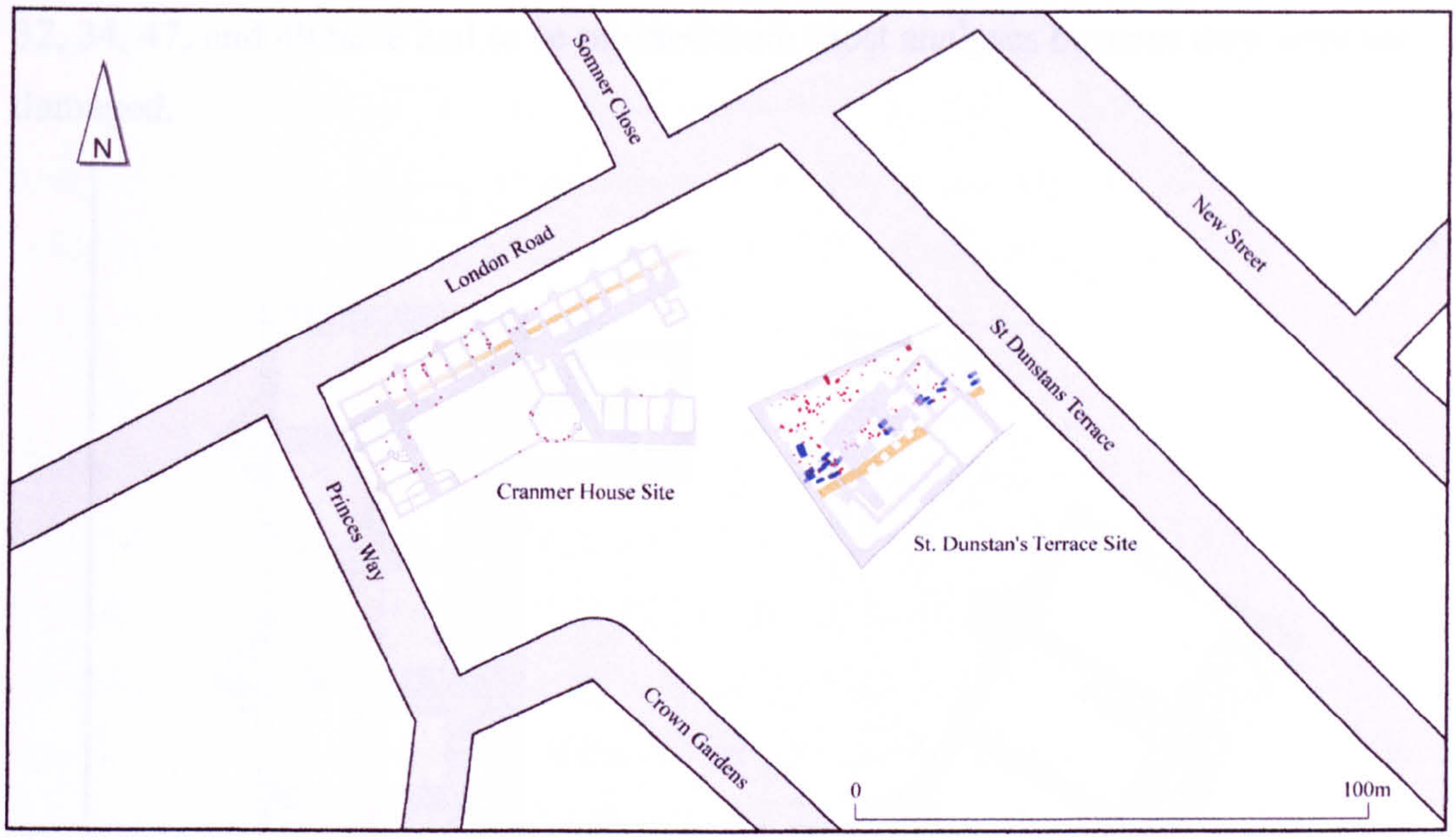

Figure 2.50: Spatial relationship between Cranmer House and St. Dunstan's Terrace sites (after Bennett 1982, Fig. 21 and Diack 2003, Figure 1)

Although the two datasets can probably be related, they have first been considered separately in order to maintain clarity, and are compared where possible in the St Dunstan's section of the chapter. It should be borne in mind that these sites can also be seen as complementary; the Cranmer House data make up for a lack of cremation information from St Dunstan's terrace (not available at the time of writing), whereas the St Dunstan's data provide a good deal of spatial information, sadly largely unavailable for Cranmer House. In terms of comparative sites and local background, the Cranmer House and St. Dunstan's Terrace sites are considered together at the end of the St. Dunstan's case study, Chapter 8.

The Cranmer House site appears to have been a quite informal rescue operation conducted as mechanical diggers cut foundation trenches for a new block of housing for the aged (the location at that time was thought to be outside the Area of Archaeological Importance). Approximately fifty-three cremation burials and two inhumations were counted within the footprint of the foundation trenches (see Figure 2.51). Most burials were severely damaged, and mainly consisted of groups of pots rescued from the spoil heap or machine bucket, although some were recorded *in situ*. All reported cremation burials have bone reports, but burials 5, 6, 8, 9, 12, 16, 20, 21,

32, 34, 47, and 49 have had to be omitted from most analyses because they were too damaged.

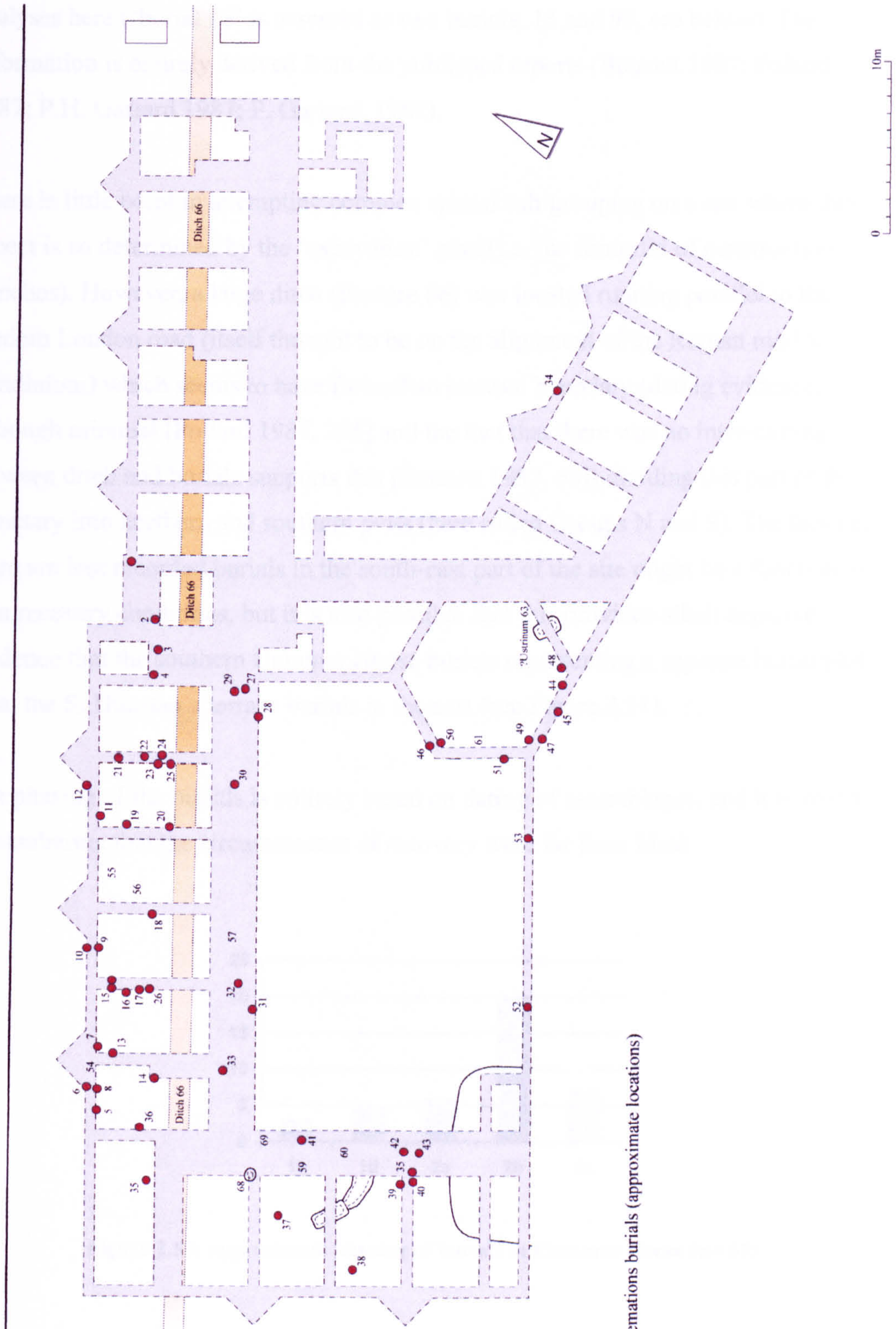

Figure 2.51: Plan of Cranmer House site (after Bennett 1982, Fig. 21)

A total of 41 burials (appendix 3.0) are considered suitable for general comparative analyses here ('burial 15' is assessed as two burials, 15 and 99, see below). The information is entirely derived from the published reports (Bennett 1987; Pollard 1987; P.H. Garrard 1987; P. Garrard, 1987).

There is little point in attempting complex spatial sub-grouping on a site where this aspect is so determined by the 'excavation' plan (i.e. the footprint of construction trenches). However, a large ditch (Feature 66) was located running parallel to the modern London road (itself thought to be on the alignment of the Roman road to Londinium) which seems to have formed an internal boundary (dating evidence, although minimal [Pollard 1987, 295] and the fact that there was no inter-cutting between ditch and burials supports this [Bennett 1987, 68]) dividing this part of the cemetery into northern and southern plots (here called Groups N and S). The fact that there are less recorded burials in the south-east part of the site might be a function of data recovery conditions, but it is also possible that this provides albeit negative evidence that the southern Cranmer House burials representing a separate burial plot from the St Dunstan's terrace burials to the east (see Figure 2.51).

The phasing of the burials is entirely based on dating of assemblages, and it is worth remembering that the circumstances of recovery were far from ideal.

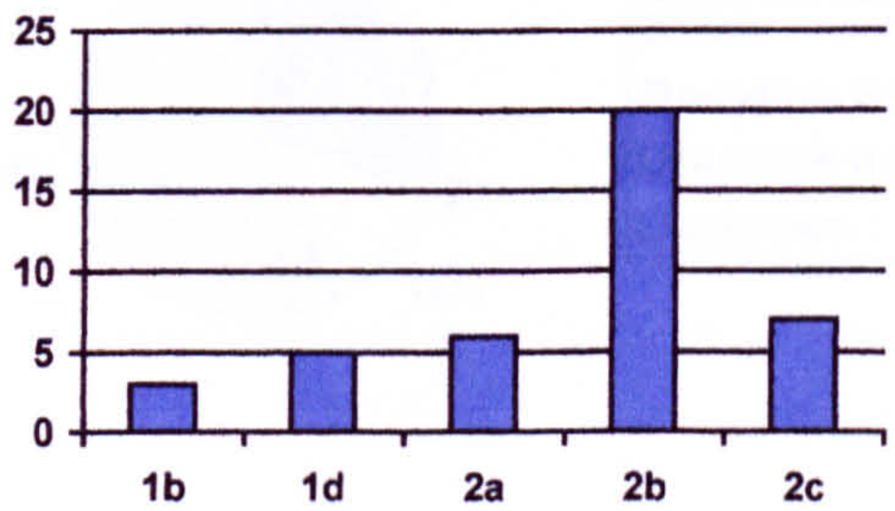

Figure 2.52: approximate phasing of burials at Cranmer House (n= 41)

Nonetheless, a pattern of increasing burial through the latter part of the first century, peaking in the second half of the second century and tailing off in the third is

suggested by the available figures, and this would seem to apply approximately equally to both Groups N and S.

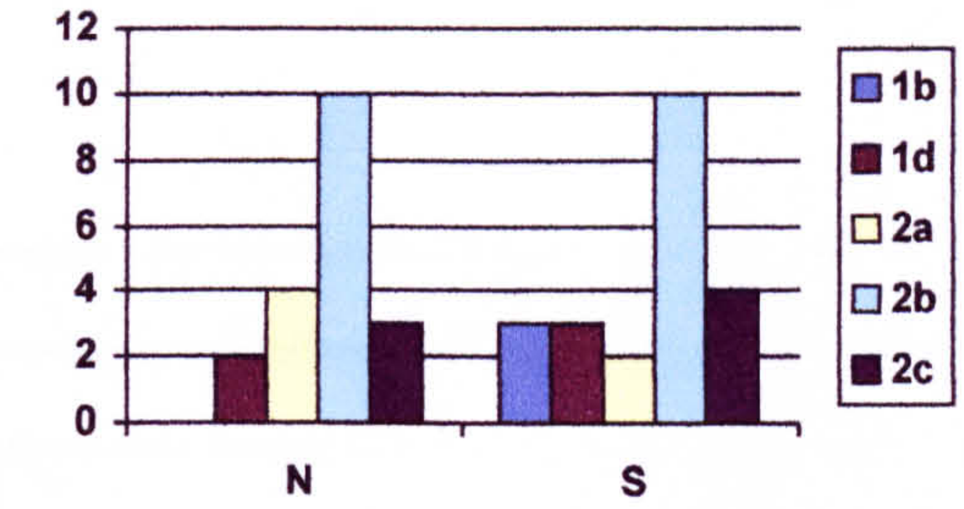

Figure 2.53: approximate phasing of possibly separate plots at Cranmer House (n= 41)

Only one of the cremated bone deposits analysed, that of burial 46,[7] was thought to contain the remains of more than one person (see below). The analysis of the sex of cremated individuals here (appendix 3.1) seems to have found relatively more males (12) and possible males (5); this of course may be a function of the criteria used by the particular specialist in this case; especially when the conditions of data recovery are also taken into account, the fact that only one possible female (burial 33) was identified should not be simply accepted as representative.

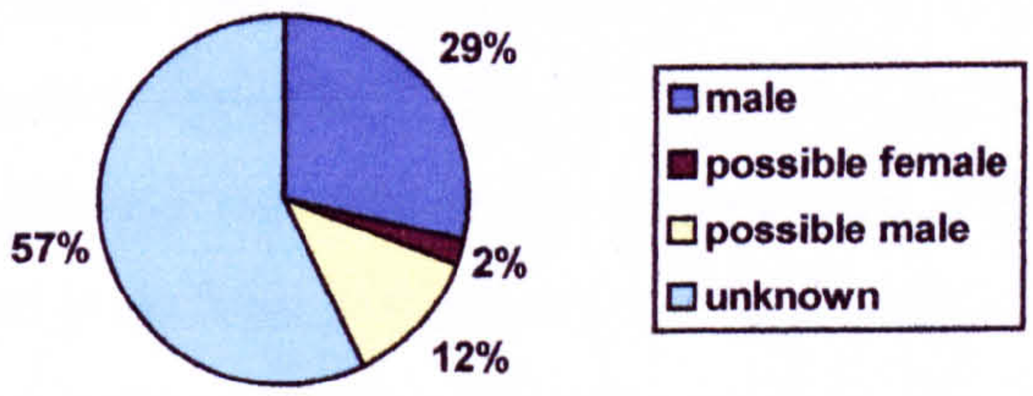

Figure 2.54: sex of cremated human remains at Cranmer House (n= 42)

[7] No separate context numbers were given for cremated bone deposits.

The majority of remains were deemed to be those of adults (31), with some young adults (7). Two children (burials 7 and 19) and two possible children (burials 36 and 52) were identified.

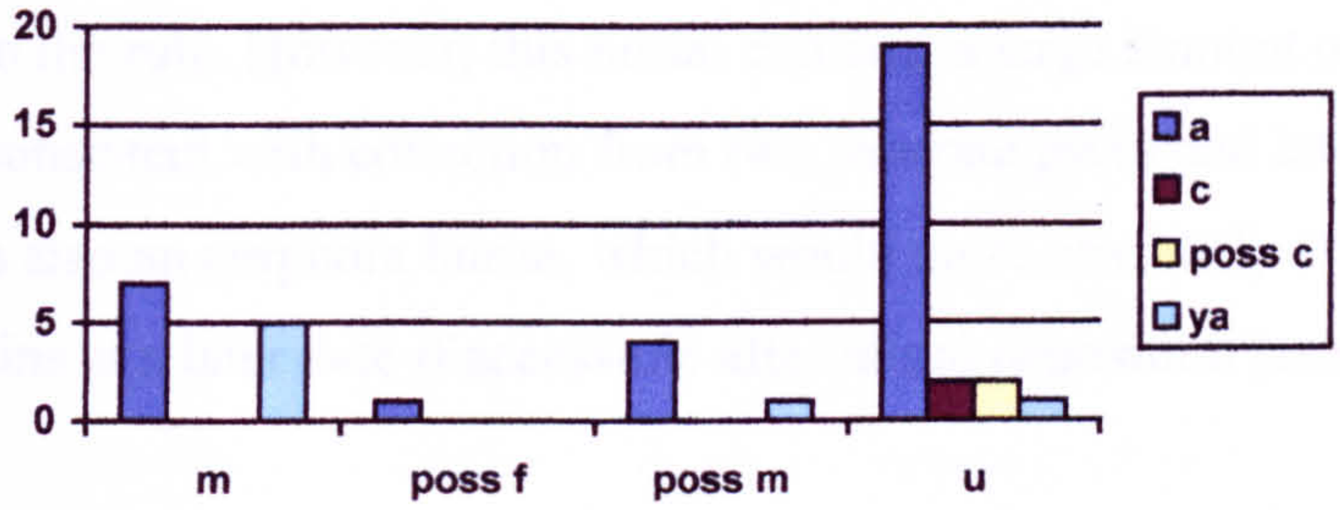

Figure 2.55: sex and age of human remains at Cranmer House compared

Cremation

Feature 63, '…a large shallow depression containing carbon and burnt clay…' (Bennett 1982, 68) in the southern plot was suggested as a possible pyre site ('*ustrinum*') by the excavator; the feature seems to have been reconstructed in the report plan (*ibid.*, Fig. 21) as rectangular and approximately 2.00m in length (this dimension is unknown and based on intuitive projection beyond the limits of the foundation trench) and about 1.00m wide, flanked by at least two post holes. Localised burning extended beyond the limits of the feature, and a number of iron nails (no details of condition) were recovered from the carbon (*ibid.*). However, no mention of any cremated bone from this feature may cast doubt on its interpretation as a cremation site. Several loose cremation deposits appear to be shown in the report (Bennett 1987, 69, Fig. 22., contexts 5, 7, 8 and 47); it is not impossible that some of these (and any other such deposits not drawn) may have been alternative pyre deposits, although loose or bagged cremation burials may be a more plausible explanation for those illustrated as including hobnails (7 and 8).

Nails mixed with several of the cremation deposits from burials (burials 2, 3, 4, 8, 9, 10, 14, 15, 19, 40, 46, 52) are the only possible indication of pyre material here

(appendix 3.2). However, it was unspecified in any case whether or not these were burnt, and they appear to form no particular pattern.

The fact that such a majority of deposits seem to represent the remains of individuals suggests that individual pyres were built in each case, although careful clearance of communal pyre facilities would also explain this. The one 'double burial', burial 46 is the exception to the rule. However, this burial contains a large amount of bone, perhaps more consistent with collection from two separate pyres and later mixing in deposition. It is also an amphora burial, which would more obviously allow addition of further remains at a later date if accessible after initial deposition (see below).

Only the largest fragment sizes of cremated bone were given by the specialist.[8] A considerably wide range of largest fragment sizes was noted (15–90mm), and it would seem that archaeological recovery conditions played an important role here; the best protected burials such as burial 11 (with intact lid) and burials 43 and 46 (in mostly intact amphorae) tended to be among those with the largest fragments. However, this makes another of the burials protected by an intact amphora (burial 45) particularly interesting for only having a maximum fragment size of 25mm. The fact that the latter contained so little bone may also be a factor. The largest bone fragment placed in a large flagon in burial 18 was less than 50mm, but primary vessel aperture would have been a factor here (whether or not this means that bone fragments were specially selected or that larger bone fragments later discarded or deposited elsewhere is unknown).

The colour of cremated bone seems only to have been recorded where slight divergences from an un-stated 'norm' were noted, these cases being where some bone was blue or black in colour (burials 17, 20/23, 28, 39, 45, 99), or where some particular 'whitening' had occurred (burials 2, 27, 33, 48). By inference therefore, the norm would seem to have been off-white, suggesting a general level of mineralised material, especially if the acidic clay soil conditions of the site are taken into account (cf. inhumations at Cranmer House [and St Dunstan's Terrace, *pers. observ.*], where little of the bone survived). The specialist provides interpretations of degrees and

[8] To aid comparison, with three of the deposits a control of 75mm was recorded by me where only a general expression such as 'pieces are large' was used in the original catalogue.

variability of burning in each case, but these seem to be based on somewhat unclear and inconsistent criteria. Nonetheless, the bone deposit of burial 45 might be especially interesting in this area in that it was recovered intact and yet has very little bone (see below), some of which apparently showed some blue discolouration.

No diagnostic features of apparent pyre goods in terms of cremation methods were either recorded or could be reconstructed, except that burnt antler objects in burials 10 and 15 are fragmentary; if these indeed derive from the pyre, some sort of breaking up of objects (other than mere abandonment to burning) is suggested. Several cases where hobnails are mixed with bone seem more likely to indicate placing of footwear on top of bone at deposition (see below). No animal remains or charred plant remains were recorded, but again this may well be more a function of specialist expectation than a lack of the material being present.

The only possible pyre goods to be convincingly recorded are the several interesting 'burnt antler fragments' objects in burials 10 and 15. As in burials 2 and 3 at the Crundale Limeworks site (see Chapter 6), these may be the remnants of inlay from wooden objects of some sort apparently consumed on the pyre (possibly biers). Again, it is far from certain that these finds represent the only possible pyre goods in the deposits. Hobnails apparently mixed with the cremated bone seem to have been above the bone in burials 4, 7, 33, and 46, suggesting that these were the remnants of footwear placed on top of primary containers or bone deposits at deposition, rather than pyre goods. [9]

No bone was recorded for burials 5, 6, 8, 12, 16, 21, 32, 34, 47, 49 and 51, and this has to be considered as probably resulting from destruction of contexts during excavation, rather than 'cenotaphs' or the like. Furthermore, bone deposits from burials 20 and 23 (apparently those of a probably male adult and young adult) were accidentally mixed during the original analysis, giving a total weight of 1100g; for the purposes of this analysis burial 20 (heavily truncated) has therefore not been

[9] On several occasions hobnails were described as being mixed with bone in the main report, but these were either described as simply nails in the small finds report, or not described at all. I have had to go with the small finds report, which positively identified hobnails in the other cases.

considered, and the bone deposit of burial 23 has been recorded as being less than 1000g and those of an adult, possibly male, as a control.

The over represented lower bone weights (appendix 3.1) of less than 250g and less than 500g respectively are generally among those deposits with the smaller fragment sizes again suggesting that post-depositional truncation not to mention the 'method' of excavation are the most important factors here (with one potentially significant exception, burial 45, see below).

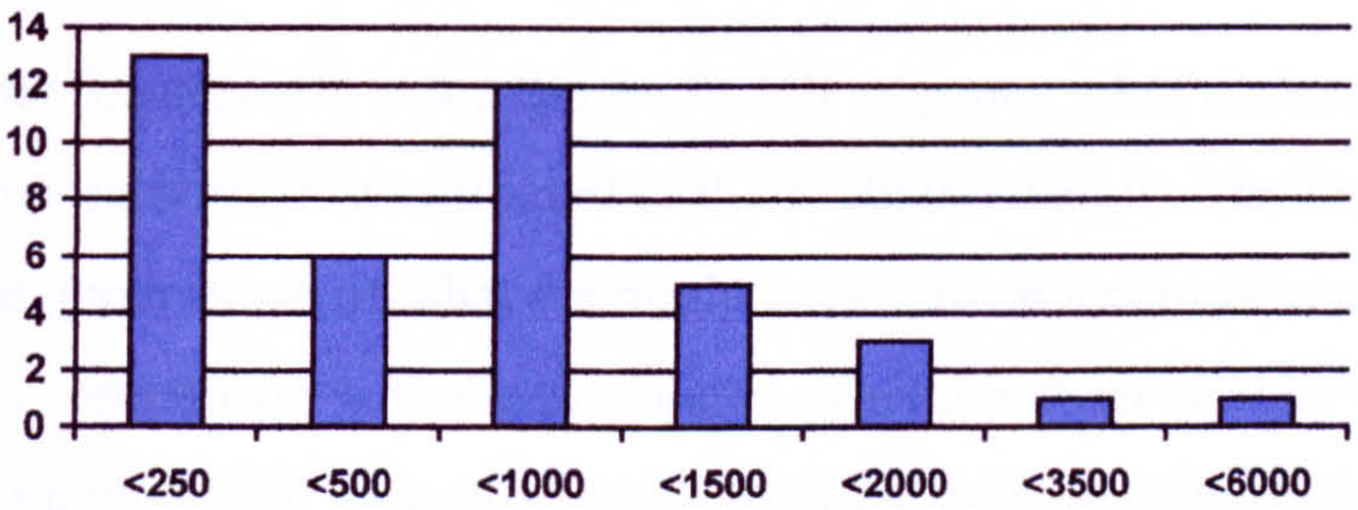

Figure 2.56: overall range of deposited bone weights at Cranmer House (n= 40)

If these probably disturbed deposits are discounted, it is noticeable that deposits of between 500g and 1000g account for the next highest number of burials, with the numbers gradually decreasing as larger amounts of bone are reached. If truncation is taken into account, then, we might suggest the possibility of a general pattern of collection and deposition on this site of approximately 750g to 1500g of bone (intact amphora burial 43 contained 775g), with some exceptional cases moving beyond this. This represents a considerable amount of the bone being collected in each case, but not a pattern of collection and deposition of all the remains from an adult cremation; in fact most deposits seem to have more like half of what we might expect from a cremated adult (perhaps representing collection of all the most mineralised remains available at the end of the cremation?).

If the larger bone deposits are compared, it is noticeable but probably not significant that they all derive from the same general phase (2b= 150–250), and that most are from the possible burial plot north of the ditch.

Phase	Spatial sub-group	Burial	Sex/age	Weight in grams
2b	N	1	au	1675
2b	N	4	amp	1750
2b	N	15	yau	1800
2b	N	2	yam	3200
2b	S	46	am+au	5975

Figure 2.57: comparison of larger bone deposits from Cranmer House

It is possible that the deposits being those of adult or young adult males, or of particularly large individuals contributed to their relative weight. The deposit in burial 2 is towards the upper range of what we might expect from a complete adult male skeleton and, in comparison with the postulated general pattern of bone weights for the site, we might wonder if more than one individual is represented here even if no diagnostic features suggesting this were present. Burial 46, preserved by use of a modified amphora as a secondary container, more definitely seems to have contained the remains of at least two adults (see below).

Another deposit worth further consideration is that in burial 45, which was also recovered intact having been protected by an amphora. This deposit, in sharp contrast to that of burial 46, contained only 35g of very small fragments of partly blue coloured bone. On the one hand this might argue for salvage of small amounts of bone from an 'unsuccessful' pyre; on the other hand a particular pyre/collection method and deposition might have been carried out in this exceptional case. Alternatively, a post-depositional removal of bone and/or other objects from this amphora cannot be ruled out.

Skeletal elements are described for each burial but no proportions given. An overview suggests that skull and/or lower limb fragments were present in most cases, with axial and upper limb components less common. However, this may be due to skull and lower limb fragments being more identifiable at a smaller fragment size, not to mention varied conditions of survival of the samples: comparative analysis of the

published data would not produce secure results, given excavation and analysis conditions.

The very large amount of bone in the amphora of burial 46 certainly suggests (along with diagnostic features?: although these are not detailed in the catalogue and the interpretation may have been based on the sheer amount of bone) that a considerable amount was collected from either two pyres (consecutive pyres either in the same place or separately) or one combined cremation. However, secondary rites involving the revisiting of the amphora *in situ* can also be suggested here.

The inclusion of nails (if burnt and indeed from the pyre) in some burials (2, 3, 4, 8, 9, 10, 14, 15, 19, 40, 46, 52) might point to the use of a gravitational method of sorting bone in at least some cases. The lone hobnail in a secure context as mixed with the large deposit of cremated bone in burial 46 may or may not have been burnt, and in any case may have been from (possibly secondary) mixing of bone deposits in this case. Burnt antler objects in burials 10 and 15 may have accompanied cremated bone sorted through a gravitational method, or may equally have been particularly selected from the pyre or elsewhere.

Deposition

Cremated bone deposits

Although the burials at Cranmer House all appear to be of sorted cremated bone, it is possible that some of the burials with no cremated bone reported (5, 6, 8, 12, 16, 21, 32, 34, 47, 49 and 51) were originally 'cenotaphs', or had very small 'token' amounts of bone. Burial 45, protected by an amphora but only containing 35g of bone might also be such, but alternative interpretations of possible secondary rites are afforded by the amphora context. It is possible that alternative deposits of pyre material were either not seen or not recorded in the excavation, or that inclusion of further pyre residues within burials (Brandschuttgräber) were similarly unrecognised.

In only eight cases was the burial context sufficiently intact or reported for the location of cremated bone in the pit to be reconstructed. Of these the majority (seven) seem to have had the bone deposit roughly centrally placed, while amphora burials 45 and 46 were housed in large pits with the container at the west and southwest respectively.

Pit design

Little of the various pit designs is known; of those reconstructed in section (see Bennett 1987, Fig. 22), the majority seem to be approximately the correct size to fit contents side by side on the base of the pit, and would therefore appear to have been dug with the prospective contents in mind. However, the amphorae in burials 45 and 46 might show a different arrangement, with much larger pits (approximately 2.00m in burial 45 and 1.60m in burial 46) than the secondary containers required in each case. Moreover, the amphora in burial 45 seems to have been deposited (or redeposited?) in a smaller cut into the base of an existing pit. The alternative explanation is that the cuts of more 'made to measure' pits were missed in difficult excavation conditions.

Primary containers

In the three amphora burials (appendix 3.1) of phase 2b in Group S, either no primary container or a bag of some sort was used. However, in the overwhelming majority of cases (38) a ceramic container was used (appendix 3.3), and of these by far the most used a jar form. The jars tended to be coarse ware and of little typological diversity, although those in burials 30, 2 and 17 look from drawings to have uneven rims, and so might be classed as 'seconds'. The two interesting exceptions to this tradition are burial 29 (Phase 1b) where a bulbous wheel-thrown bowl was used, and burial 18 (Phase 2a), where the bone was contained in a large two-handled flagon with a pebble stopper.

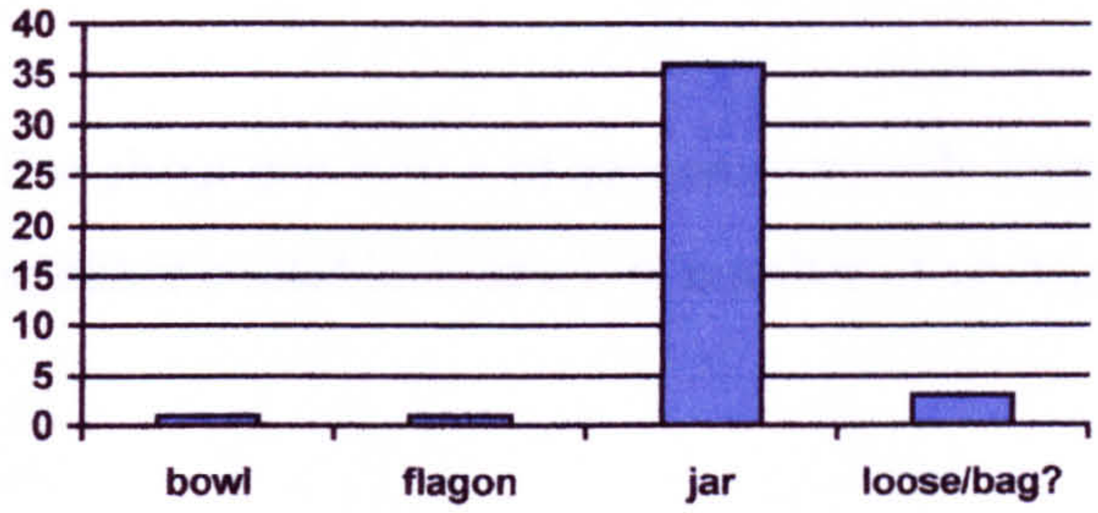

Figure 2.58: primary container selection at Cranmer House (n= 41)

Secondary containers

Five burials seem to have more or less convincing evidence of secondary containers (appendix 3.4). The three burials of phase 2b with intact amphorae (43, 45 and 46) are the most obvious examples, but these robust containers were more likely to be recognisable given the excavation conditions. Burial 11 was thought by the excavator to be contained within a box (vertical soil stains observed in section); burial 33 contained fourteen nails, some re-corroded, which may suggest a box or wooden shuttering of the pit, or a wooden cover for the burial. It is more likely that such ephemeral evidence would have been missed in this excavation than not. Amphora fragments were also found in 'burial' 34 (not associated with any cremated bone or other finds and not included in this analysis), and a body sherd from this type of vessel may have been used as a 'lid' in the damaged burial 40.

All amphorae of burials 43, 45 and 46 are reported as Southern Spanish Dressel 20 types. The amphora in burial 43 was severely truncated by the machine and no detail of its modification is known. All amphorae were found to contain all of the objects associated with them. The amphorae in burials 45 and 46 both appear to have been broken slightly above the shoulder of the vessel; no necks or handles of these vessels seem to have been recovered, so perhaps alternative 'lids' were used, or none at all. The burial 45 amphora had been mended with a lead plug, perhaps suggesting that it was old or had a secondary use prior to its selection for a mortuary context.

Accessory vessels

The first thing to notice about deposition of accessory vessels (appendix 3.5) on this site would seem to be either a total lack or a low number of vessels in the earlier burials.

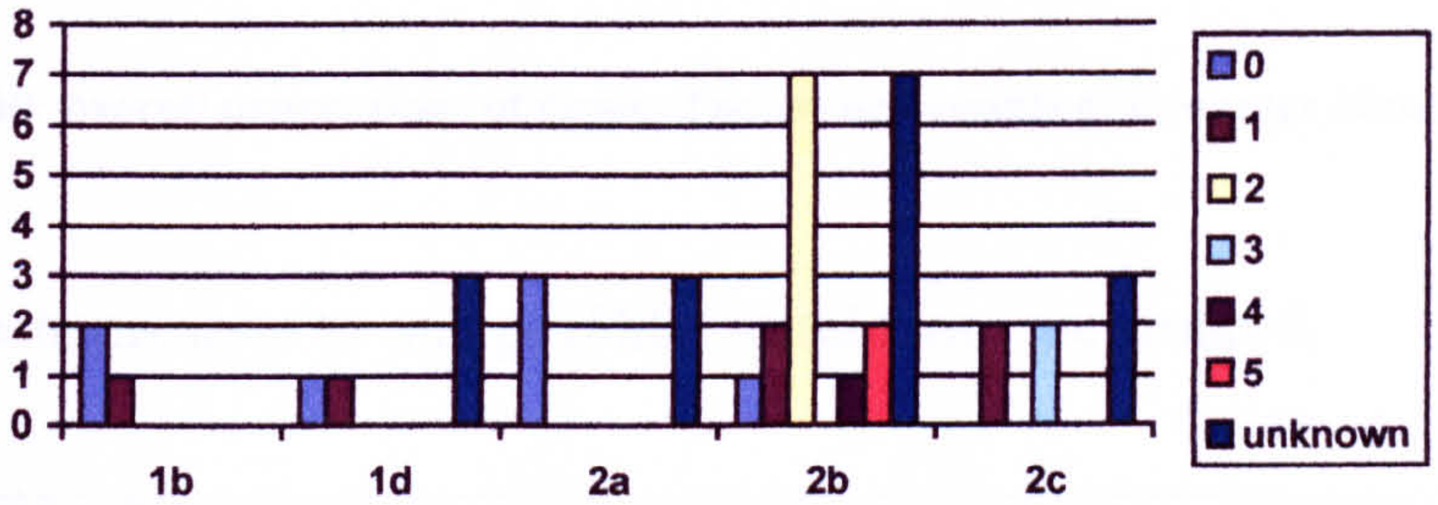

Figure 2.59: phasing of minimum numbers of accessory vessels in each burial at Cranmer House (n= 41)

If excavation conditions and the overall increase in deposition in phase 2b are taken into account, it would seem possible that the earlier burials on this site were less likely to be accompanied by accessory vessels, although results may well be biased by the fact that there were less of these burials to compare.

Certainly some elaboration in terms of the sheer number of accessory vessels appears from this analysis to develop along with increased overall deposition in the mid- to late second century. This elaboration seems mainly to take the form of inclusion of at least two accessory vessels. However, burials with at least three (23, 33 and 99), four (burial 19) and five (burial 27) accessory vessels seem to be further specialised in this area. Burial 40 may also have had at least three accessory vessels, but the context was destroyed by the machine and mixed with burial 39.

An overall variability in types among the total of 37 accessory vessels is indicated.

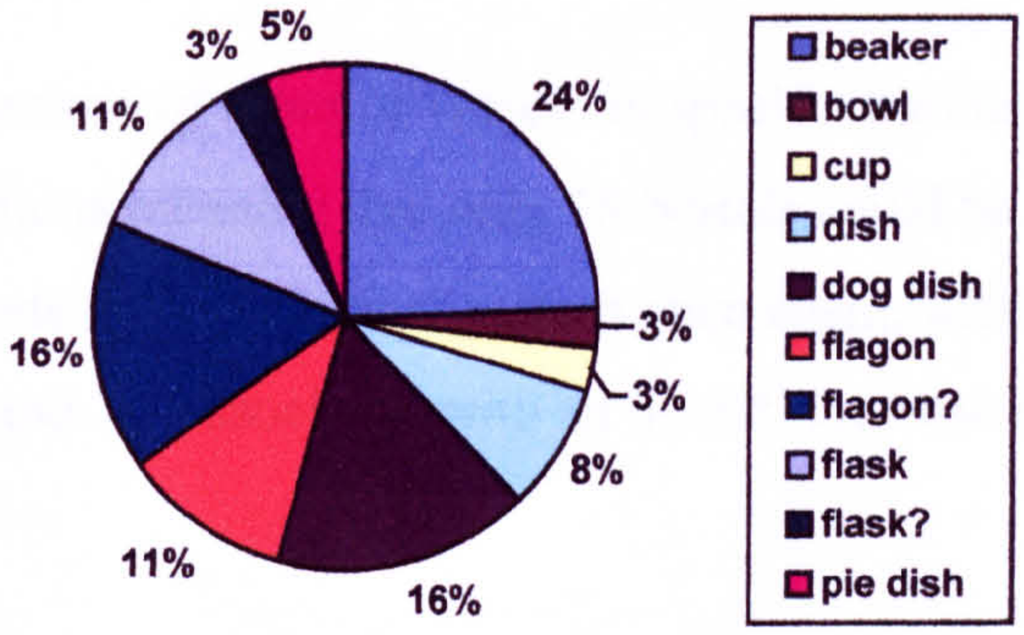

Figure 2.60: overall proportions of types of accessory vessels at Cranmer House (n= 37)

But distinct patterns seem to emerge if like vessel forms are grouped.

Type	Total	Percentage
Flagons (and flagons?)	10	27%
Beakers [1 miniature]	9	24%
Dog dishes [1 miniature] and pie dishes	8	21%
Flasks (and flasks?)	5	14%
Dishes (samian)	3	8%
Cup (special)	1	3%
Bowl (samian)	1	3%

Figure 2.61: numbers of accessory vessel types at Cranmer House

Especially if flagons and flasks are grouped, pouring forms are the best represented, closely followed by beakers, and then, perhaps somewhat surprisingly, dog-dishes and pie dish forms. This overall pattern of frequency would tend to suggest once again the Philpott model of pouring, drinking and dish forms (1991,33), but with an interesting local propensity to use certain specialised non-samian forms for the dish component. Possible flagons appear to be the only accessory vessel type used in the first century (burials 42 and 52), and all other types seem to be introduced with the increased numbers of burials in the second century. The low numbers of dishes and bowls are samian (see below); the limited accessory provision of the cup in burial 50 is perhaps particularly specialised.

An analysis of combinations of types of vessels in specific burials, despite difficulties of data recovery conditions meaning that only 25 burials could be considered from this perspective, suggests a chronological pattern once again, with considerable diversity in phases 2a and 2b, associated with an overall increase in the number of burials in these phases.

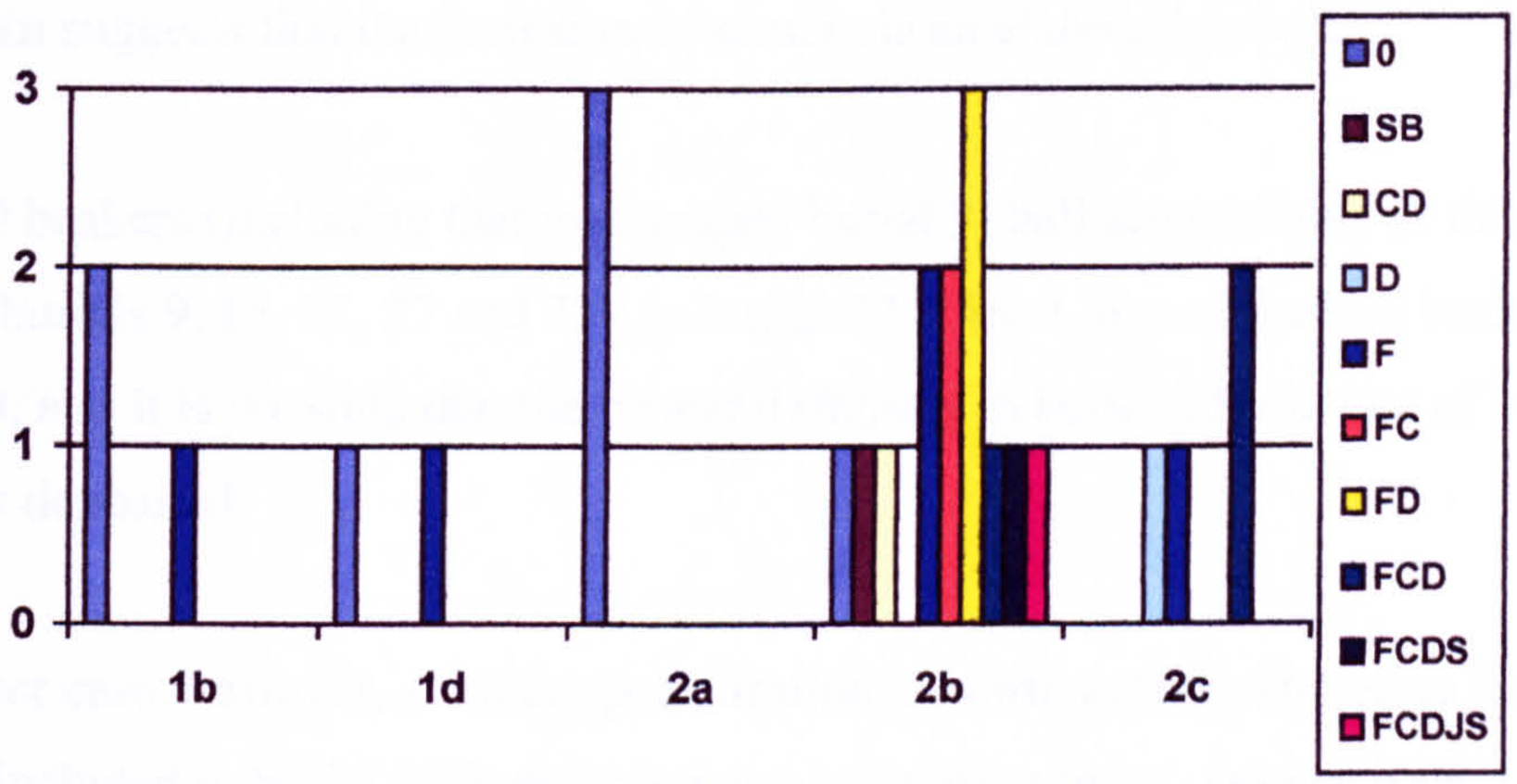

Figure 2.62: possible phasing of accessory vessel combinations at Cranmer House (n= 25)

The flagon or flask only 'combination' is represented throughout, although introduction of other forms in the second century is not obviously an embellishment of this 'tradition'. Burial 19 (FCDS combination) seems to use but develop an FCD combination by including a samian dish and miniature dog dish, while burial 27 seems to retain the FCD combination but perhaps develops it by including two dog dishes and two beakers respectively. Again, burial 23 (combination FCDJS) as well as flask, beaker and pie dish also has a jar and a miniature beaker. Burial 50 would seem to be particularly unique with its SB combination of specialised cup (see below) and samian bowl.

No samian vessels are recorded for the earlier phases, and samian formed a remarkably small proportion of the vessels in phases 2b and 2c, with only four vessels confirmed in total. It should be noted here that utterly destroyed burials 5 and 12 (not generally included in these analyses) and burial 40 (also massively damaged) were also found to contain fragments of samian in insecure contexts. Even so, this still

suggests that samian was a rare diversification on this site, with only one vessel added in each case.

The minimum numbers of samian vessels recorded amount to a dish in each of burials 19 (apparently that of a child), 22 and 99 and a bowl in burial 50. Destroyed burials 5 and 12 might have included a Drag.37 bowl and Drag. 33 cup, and heavily disturbed burial 40 may have included a Drag. 31 dish. The rarity of the finds and variability of types again suggests that the inclusion of samian is an elaboration here.

Out of 10 beakers (including that in damaged burial 9) half are probable or definite imports (burials 9, 15, 23, 27 and 33); in burial 27 at least, one of the two beakers was an import, and it is possible that the beaker definitely in burial 23 was one of two originally deposited.

In the latter case, however, another specialisation is worth noting. The other beaker possibly included in burial 23 is recorded as a 'miniature form', (as is a beaker from destroyed context 'burial' 8). The second dog dish in burial 19 is also possibly a miniature form, and the cup in burial 50 is of a particularly specialised form, thick walled and roughly made, perhaps especially for this particular mortuary context.

Not enough of the locations of accessory vessels in relation to cremated bone were recorded for a comparison of placement on the horizontal plane to be viable, although no pattern was evident. In terms of more complex positioning of objects, accessory vessels in the two amphora burials to include such objects (43 with flask and 46 with flagon and pie dish) were contained within the amphora in each case. In burial 28 the dog dish had been inverted over the primary container to form a 'lid'.

Other accessories

Of the 24 burials thought to be intact enough to analyse this aspect (appendix 3.6), a considerable number contained at least one other accessory (footwear counted as one), while fewer contained more than one and one burial in particular (amphora burial 46 with the remains of at least two individuals) was distinguished by five such items. The numbers of other accessories deposited appear to be phased, with increased numbers

of accessories, as well as cases with two or more different objects being associated with the later burials, and particularly with increased overall numbers of burial in the second century.

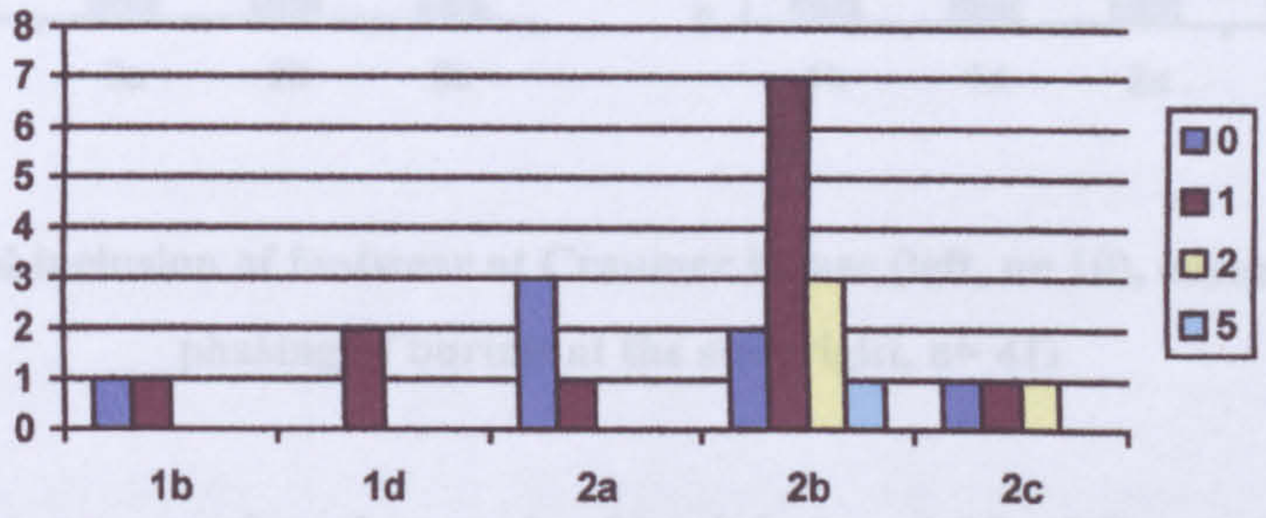

Figure 2.63: phased numbers of other accessories at Cranmer House (n= 24)

There is some variety of types of other accessories but footwear is by far the most common, convincingly recorded in 10 burials (30, 7, 11, 18, 4, 27, 28, 46, 50, 33). Most shoes or boots appear to have been intact at the time of deposition, although it is possible that some with very few hobnails (burials 18 and 46 with only one each) may be derived from the pyre. There would seem to be a tradition of placing footwear in burials throughout the phases; in fact in probably the earliest burials of the sample (phases 1b, 1d and 2a) other accessories are limited to footwear (burials 30, 7, 11, 18), and it is only in the probably later burials of phases 2b and 2c that alternative elaborations in terms of other accessories seem to occur. Moreover, deposition of footwear appears to proportionally correlate with overall numbers of burials from each phase, suggesting that provision of this accessory was limited to a certain group over time, although the 'criteria' that may have defined such a group (gender, age, 'status', occupation, etc) are unknown.[10]

[10] Sex and age categories are inconclusive

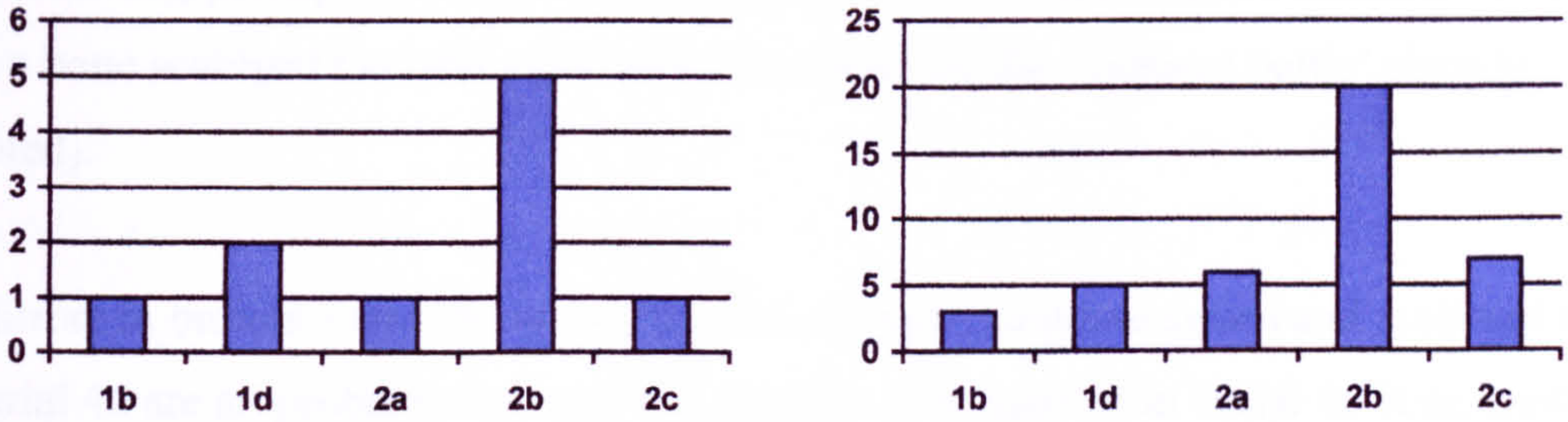

Figure 2.64: phased inclusion of footwear at Cranmer House (left, n= 10), compared with overall phasing of burials at the site (right, n= 41)

A copper alloy mirror was found in each of burials 3 and 99 of Group N, the former burial also contained a small glass flask, not reported in detail, but possibly of the same small 'unguent bottle'[11] form recorded for burials 46 and 48 to the east of Group S; beyond these small groups of duplications, the other accessories are quite diverse.

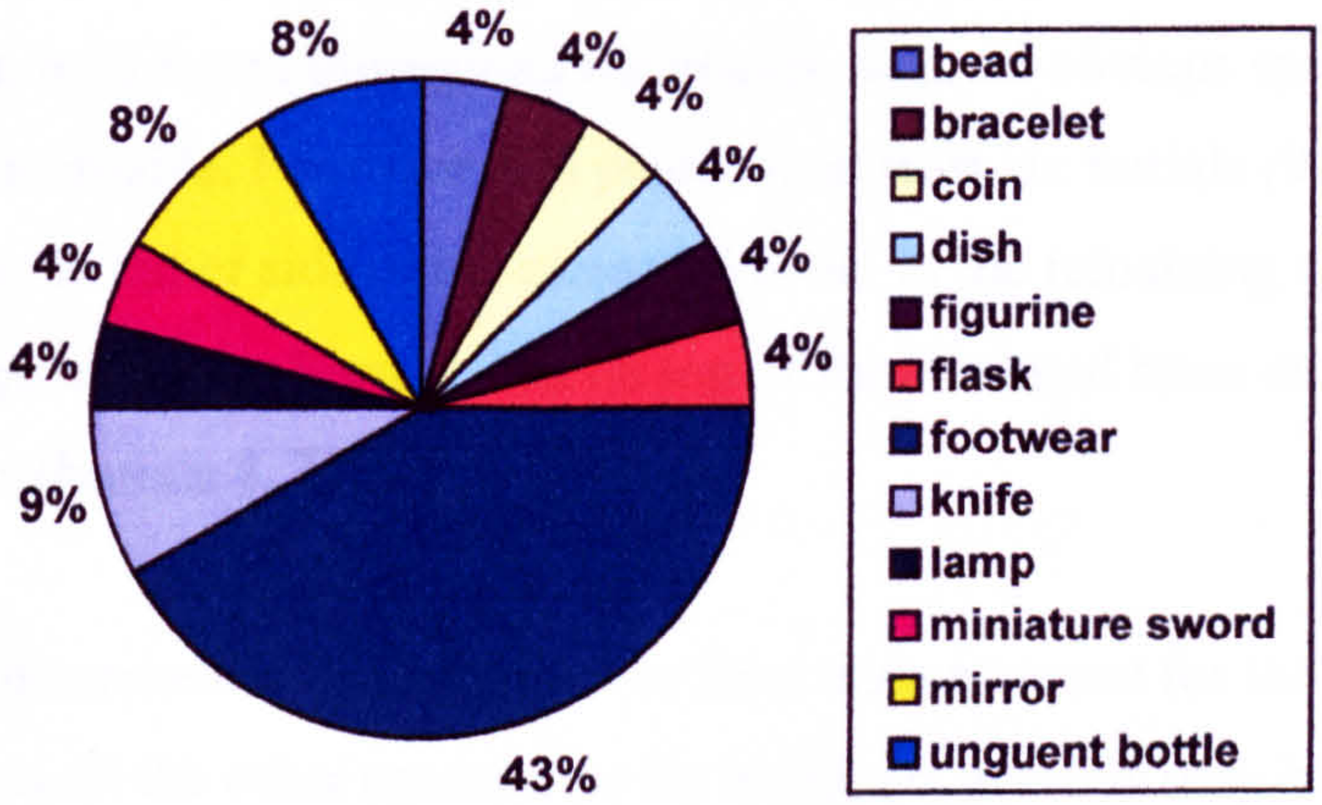

Figure 2.65: overall types of other accessories at Cranmer House (n= 24)

Burial 19, which seems to have contained the remains of a child, also contained a bone bead that may originally have been attached to a small copper alloy ring shaped object (possibly a small bracelet), burial 23 was equipped with a ceramic lamp, burial 28 a coin of Antoninus Pius, burial 40 a small pipe clay *Dea nutrix* figurine, and burial 33 a pewter dish. Burial 46, an amphora burial and containing a large amount of cremated bone from at least two adults, seems to be more elaborate, with the inclusion of two knives (the latter having a bone handle with traces of ornate

[11] A miniature glass bottle form apparently recorded under different names elsewhere.

decoration), perhaps in relation to this being a 'double burial', and a miniature sword in a bone scabbard (as well as possible footwear and the 'unguent bottle' already noted).

Mirrors in burials 3 and 99, as well as the very rare miniature sword and scabbard in burial 46 are all probably imports, and the pipe clay figurine in burial 40 is certainly from central Gaul. The handle of the mirror is described as 'detached', and no handle is reported for the mirror of burial 99, although these are matters of specialist selection or ritual modification is unclear. The 'unguent bottle' of burial 46 showed signs of having been broken and mended, suggesting continued use prior to deposition (or even redeposition?). The pipe clay figurine of burial 40 may well have been deliberately modified either before or at the time of deposition, as the head (not found) appears to have been broken off (see also Chapter 8).

The positioning of footwear in the Cranmer House burials appears to fall into two interesting groups, both found throughout the phases, with no obvious spatial or sex/age pattern discernable. Footwear was placed in at least six burials (9, 11, 18, 27, 28 and 50) so as to be either side of the cremated bone. In the remaining cases, the shoes or boots appear to have been placed on top of the cremated bone in respective primary containers (burials 4, 7, 33 and 46).

The latter type of placement also seems also to have been reserved for the lamp in burial 23, as well as all the other accessories for burial 46, and this may have been the case with the possible bracelet of burial 19 and the coin of burial 28, which are recorded as being within primary containers but in an unspecified position. The pewter dish in burial 33 was in the bottom of the primary container (a jar) with the cremated bone heaped on top. Only the pipe clay *Dea nutrix* of burial 40, and the mirror of burial 3 were perhaps placed outside the primary container. The mirror of burial 99 seems to have been used as a lid for cremated remains.

Combined selection

Only 20 burials (appendix 3.0) were sufficiently intact to consider combined selection profiles (see figure 1.17, Chapter 4 and notes to appendices). However, an interesting

pattern is suggested by the phasing. In particular it would seem that a standard form of burial with only a ceramic primary container (CN0000 and minor variants) dominates the early phases, while burials of the latter half of the second century and beyond show a notable diversification in terms of primary and secondary containers, accessory vessels and other accessories.

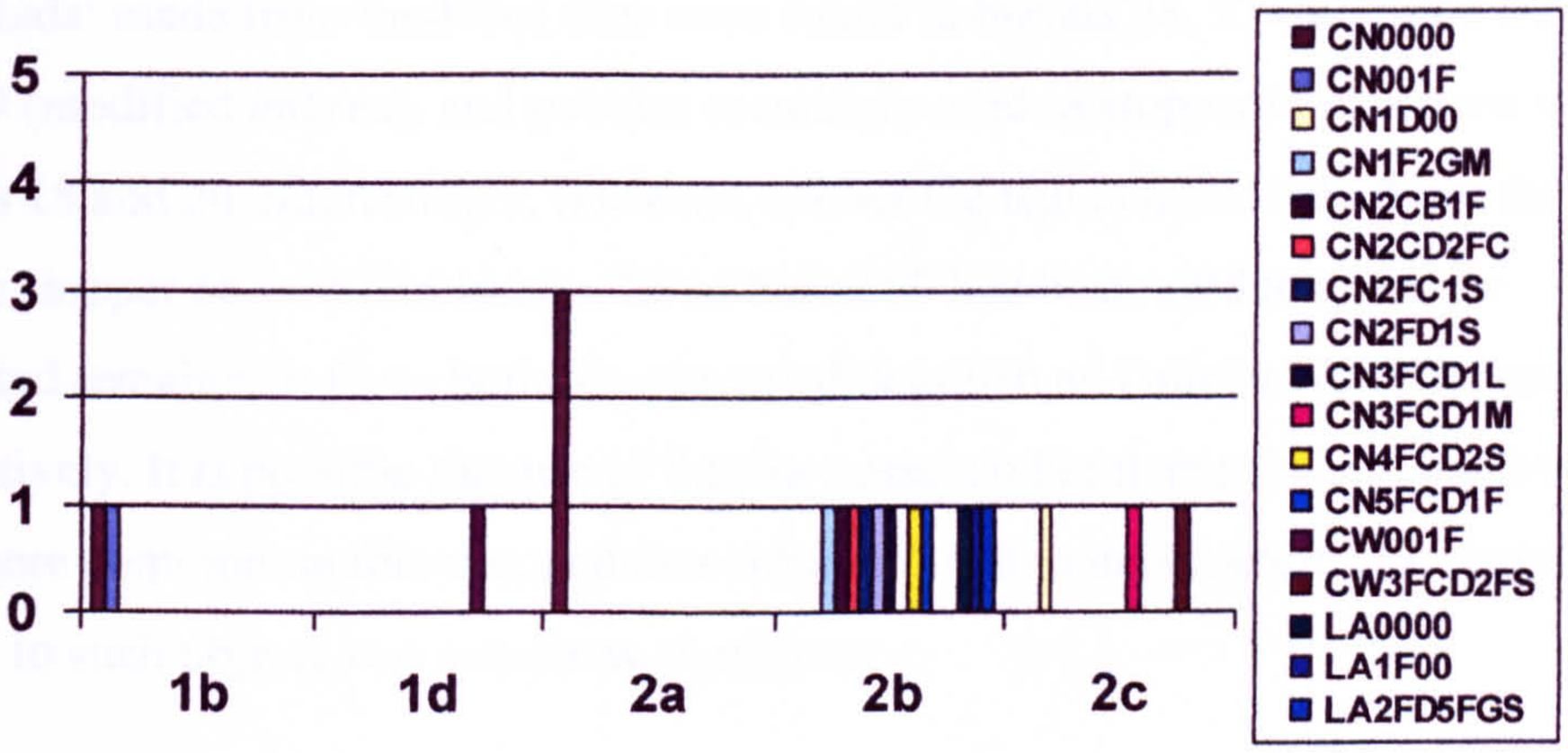

Figure 2.66: diversity of combined selection at Cranmer House, phases 1b–2c (n= 20)

Post-depositional or secondary rites, redeposition

Because of the nature of the excavation, the site presents an extremely limited picture in terms of both vertical stratification and horizontal comparison. The excavator reports that small mounds over burials 5, 8 and 9 were seen in section, as was a posthole for a possible marker cut into the backfill of burial 46 to the north-east of the amphora therein (although no dating evidence confirms the association of the two features). Mounds and markers along with apparently little inter-cutting of burials suggest that the cemetery was laid out and would have allowed continued access to burials after initial deposition.

The amphorae in burials 43, 45 and 46, if they were originally equipped with lids would seem more likely to have allowed continued access to deposited remains; indeed, the fact that burials 45 and 46 contain so little and so much bone respectively may make us wonder whether bone was removed or added to after initial deposition in each case. Certainly the two individuals represented in burial 46, along with

'footwear'(only one hobnail), 'unguent bottle' (broken and mended), and two knives might suggest further deposition or redeposition of objects.

A number of burials have 'lids' (appendix 3.7) surviving that have protected cremated remains and would have allowed continued access to them. In one case this is inferred as an actual lid possibly for the primary container (jar) in burial 50 was not found *in situ*. 'Lids' made from modified tiles were found in burials 28, 53 (modified *tegulae*) and 99 (modified *imbrex*), and pebbles seemingly used as stoppers for flagons in burials 18 and 28. Interestingly, however, neither the tegula lid burial 28 nor the pebble stopper or modified imbrex lid of burial 99 had been used to cover the cremated remains: in these burials an inverted dog-dish and mirror had been used respectively. It is possible that use of lids for vessels other than primary containers was more common on this site, and that either protection in perpetuity, or continued access to such objects was somehow significant.

Profile

Possible site level traditions

A general picture of quite uniform cremation and collection method is suggested (with only minor exceptions), involving the production of considerable amount of fragmented, mineralised skeletal material ('pyre goods' were also fragmented in the two cases where they were recorded), and possibly collection and perhaps gravitational sorting of between 750g and 1500g of cremated bone in most cases (allowing for post-depositional processes and appalling excavation conditions). The fact that no animal or plant remains were identified in bone samples is probably a function of limited specialist criteria for examination rather than a local tradition of not using these items. In the same way, a lack of Brandschuttgräber or alternative deposits of pyre material cannot be simply accepted as a part of the local profile, as such features would not have been specifically looked for or recognised at the time of excavation.

Excavation conditions should also be taken into account when considering overall types of burials, as it may be that only ceramic containers containing at least some cremated bone were recognised as cremation burials, based on the recognised criteria of the time. Nevertheless, beyond this, several depositional traditions can be suggested, some apparently localised. The vast majority of recognised burials throughout the phases as in Groups N and S used ceramic and locally produced jars as primary containers.

A distinct group of burials with no accessories is represented throughout phases except phase 2c. Flagons were certainly used throughout the phases as accessory vessels (as might other vessel forms but evidence may well have been destroyed). A particularly interesting local tradition is suggested here of placing footwear either side of the primary container, although in some cases footwear, like alternative types of other accessory, appear to have been placed above the cremated bone.

A number of burials from phases 2a, 2b and 2c were noted as having various lids for primary containers (and in two cases for accessory vessels also). The apparently limited size of the group is undoubtedly a result of data loss during excavation, so the level of specialisation of burials in this way (and further associated practices) must remain unknown.

Chronological patterns

The overall phasing of the burials, however difficult to establish, seems significant in that cremation and associated deposition appears to have increased (either representing an increasing propensity to use this particular cemetery, or possibly indication that such treatment in death was available to a wider group) in phases 2b and 2c, peaking in the mid- second and early third centuries. The increase in number of accessories in the later phases seems to have had an impact on the types of accessory vessels deposited with a general trend towards increased numbers and diversity of combination. While the FCD pattern of selection of accessory vessels seems to underlie this in terms of the overall assemblage, a particular use of relatively local non-samian dish forms on this site seems to be identifiable. The use of samian is limited to a small group of burials as is the inclusion of imported beakers and

miniature forms, although none of these burials could be associated in any other way. Diversification of other accessories also appears to have developed in phases 2b and 2c in line with increased numbers of burials with other accessories.

Spatial sub-groups

This aspect of the profile is especially difficult to reconstruct because of the excavation conditions in this case. Northern and Southern sub-groups seem to be divided by the large linear ditch (Feature 66) running across the site, and the fact that there are no burials recorded in the north and east of the site might mean that these are separate burial plots from the burials later recorded on the adjacent St Dunstan's Terrace site. As a consequence, any small spatial sub-groups were far from convincing, requiring further corroborative evidence.

Sex/age groups

It would seem that the majority of persons afforded this treatment in death were adult or young adult; the specialist identification of mostly males might also be an interesting determinant, but could also bring the criteria on which that interpretation was based into doubt. The only clear possibility of a connection between selection of objects and sex or age of the deceased is the suggestion of a child sized bracelet in burial 22, which is thought to have contained the cremated remains of a child. The latter may be an item of personal relevance to the deceased.

Other groups

Burials 10 and 15, with the inclusion of burnt antler objects, could be said to form a group, but once again conditions of survival and analysis must preclude such an interpretation. Burials 43, 45 and 46, represent a separate group, using modified amphorae as secondary containers, and each either having no primary container, or using an organic container, such as a bag, for this purpose. The bone deposits of burials 45 (as well as the possibly re-cut pit) and 46 (as well as the other accessories) might suggest post-depositional or secondary rites involving removal or further deposition of bone and/or other objects in these particular cases. The amphora burials

seem obviously tied to a particular phase (2b), to congregate in the eastern area of the site, and (at least in burials 45 and 46) to have been deposited in especially large pits. All such burials contained all accessories within the amphora.

Footwear was also present in all phases in numbers that appear to 'shadow' the overall numbers of burials, suggesting that this burial format was 'traditionally' associated with a certain group of unknown definition. Three burials (3(?), 46 and 48) with 'unguent bottles' and two (3 and 99) with speculum mirrors seem to form other small groups within the later phases, although especially the latter perhaps mark a more obvious crossover group with possible personalisation of burials.

Burial level diversity

Burial 45, despite using an amphora, contained very little bone, and this was highly fragmented and not fully mineralised. An alternative cremation and/or collection method can be suggested in this case, although other explanations might be equally valid, as is the case of burial 46, where considerable amounts of bone of at least two individuals seems to have been deposited.

The use of a bowl (burial 29) and flagon (burial 18) are the only recorded deviations from the ceramic jar primary container tradition (apart from the amphora burials). The apparently unique use of a box as secondary container in burial 11 (burial 33 is far less certain in this regard) should again be balanced against conditions of recovery of such ephemeral evidence.

Despite the overall assemblage suggesting the prevalence of flagons/flasks, beaker/cups and dishes, the FCD combination is far from being the norm, and some considerable specialisation in this area can be suggested, in terms of the use of imported beakers, samian and specialised miniature vessels in various burials. Burial 19 appears unique through increased numbers of vessels, 'doubling' of forms and use of a miniature dog dish (one or two other destroyed burials had miniature beaker forms); burial 23 also elaborates the FCD combination with jar and miniature beaker, while burial 50 used a unique and possibly specially made cup form. Burial 27 simply 'doubles' dog dishes and beakers.

The most obvious evidence for specialisation of burials is in the selection and in some cases the modification and placement of other accessories. A number of burials have possibly highly personalised items that are only rarely found on the site or are unique on the site (see Figure 2.75). Burial 46, containing the remains of at least two individuals, is particularly elaborate in this area with five other accessories. The pipe clay *Dea nutrix* figurine of burial 40 is also especially interesting as a cult object that may have been deliberately modified before or at the time of deposition, and the pewter dish of burial 33 is noteworthy for its location beneath the cremated bone within the primary container; finally the possible use of a mirror as a lid for burial 99 is a unique configuration for the site (although this may be another 'version' of placing other accessories above the cremated bone, seen in several instances). Overall, selection of diverse combinations of objects for particular burials is apparent (particularly in the later phases).

Site profile

Again the cremation practice would seem (admittedly through a highly fragmented 'lens' of data recovery conditions as well as idiosyncratic specialist criteria) to have been quite consistent and uniform. This uniformity extends into deposition as far as primary containers (with slight diversity), and there would seem to have been a local 'tradition' of selection and specific placement of footwear restricted to a certain group. Beyond this, selection of accessory vessels and other accessories is increasingly diverse. This diversity appears to be linked with a chronological shift towards increased availability of cremation and associated deposition in phases 2b and 2c.

8. St. Dunstan's Terrace, Canterbury

Introduction

The site at St Dunstan's Terrace first came to the attention of archaeologists in 1925 and 1926 (this was evidently not considered when planning permission for adjacent Cranmer House was sought and granted) when cremation burials were noted during construction work on the then new Telephone Repeater Station (Whiting 1927) on the site. Evaluation prior to the construction of new housing in 2000 uncovered further cremation burials (Rady 2000), some of which form part of this analysis. The open area excavation results so far available form the majority of the data considered here (Diack 2003; Bevan 2004; Lyne, 2004; Cool, 2004b; archive). Diack records an official tally of ninety-seven cremation burials to north of an obvious boundary ditch to the cemetery or plot (see Figure 2.67). There are also twenty-three inhumations (some being the earliest burials on the site and dating to the late Iron Age) mainly arranged along the boundary ditch. The area appears to have developed first as a small inhumation cemetery or plot along the boundary ditch, then as a cremation cemetery, and finally as an inhumation cemetery (again aligned on the boundary ditch).

Of the 97 'cremations' recorded, seventeen of the most destroyed or uncertain contexts had to be omitted from this analysis (6, 11,17, 20, 29, 37, 38, 42, 44, 54, 74, 82, 89, 92, 95, 97, 98), and a further 15 (13, 19, 21, 22, 35, 53, 59, 67, 70, 71, 72, 75, 78, 80, 84) could not be subjected to detailed analyses because of insufficient data at present, these must remain 'undefined' therefore (see Chapters 9 and 10); 65 possible cremation burials are analysed in detail here (appendix 4.0). All vessels originally recorded as 'bottles' in the pot report were called 'flasks', and all 'platters' called 'dishes' for comparative purposes. 'Cremations' retain their numbers but are hereafter referred to as burials.

Apart from the vaguest suggestion of two roughly parallel linear clusters running east/west across site (roughly parallel with the southern boundary ditch, no certain groups can be suggested in terms of the layout of the burials). For the sake of comparative analysis these groups are however considered as possible Groups N and

S to north and south respectively (see below). It is possible that the St Dunstan's site does indeed represent a separate burial plot from the Cranmer House burials, especially if the apparent paucity of burials to the east of the latter site is a true reflection of the archaeology (cf. Figures 2.50 and 2.51).

Figure 2.67: Plan of St. Dunstan's Terrace site (after Diack 2003, Figure 3)

The overall phasing of burials on the site presents a similar picture to those recorded at Cranmer House, but with more recorded for earlier and later phases, and an apparent peaking of burial in phase 2a; the former difference probably reflects the fact that more burials were recorded, as well as greater confidence in early and late dating on the part of the specialist, the latter relates to broader date ranges for some of the second century burials.

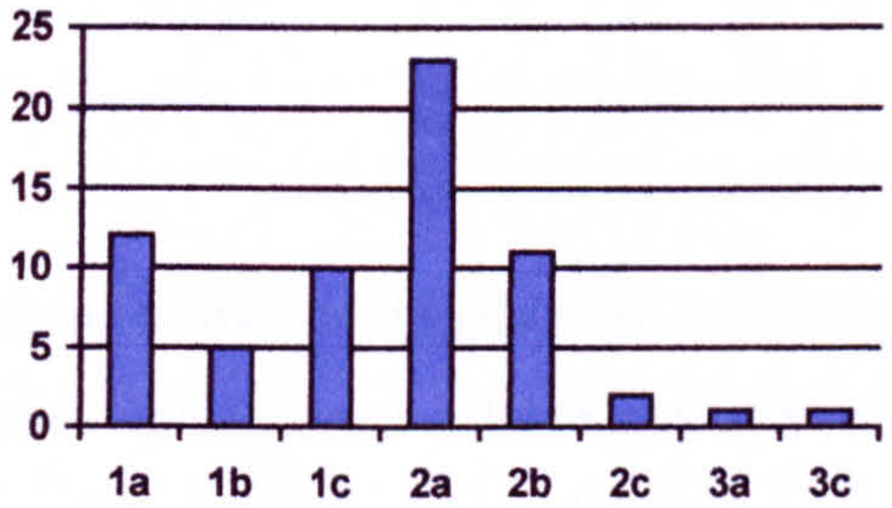

Figure 2.68: overall phasing of cremation burials at St. Dunstan's Terrace (n= 65)

The picture of increasing burial towards the second century is still the same and perhaps more secure on this site, which was subjected to open area excavation and produced more comparative results. A comparison of Groups N and S shows a similar development for both, with group S being more consistently represented throughout the phases (accounting for nine of the twelve burials in phase 1a, for example), and Group N seeming to peak more in phase 2b (accounting for 15 of the 23 burials in this phase); however, more detailed understanding of the development of the site must await further analyses.

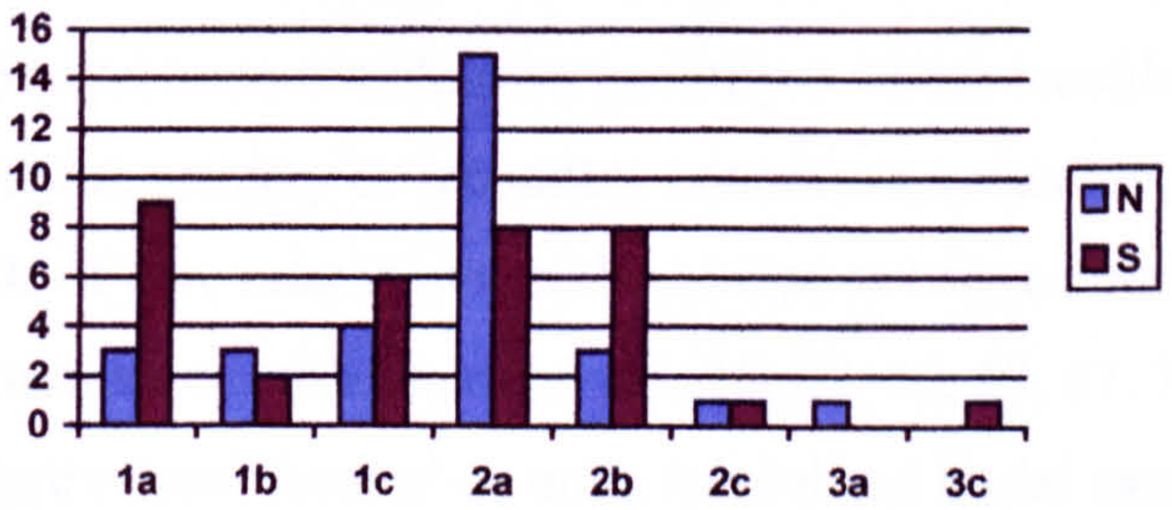

Figure 2.69: phasing and possible spatial subgroups compared at St. Dunstan's Terrace (n= 65)

For the sake of clarity in general analyses the under-represented phases 2c (28 and 65), 3a (33), and 3c (90) have been elided to form a single 'phase 3', although any significant chronological diversity between these later burials will of course be accounted for in qualitative analyses. Numbers of individuals represented by each cremation deposit, as well as sex or age sub-groups are unknown at the time of writing.

Cremation

No pyre sites or large spreads of pyre materials were noted during the excavation, and no details of cremated bone deposits are available as yet. Several other bone deposits (sometimes very small amounts and quite possibly residual) were seen in small pits as well as the apparent cemetery boundary ditch (groups 1, 2) during the excavation to be mixed with carbon or other broken or burnt objects, and these could either be pyre related features or disturbed 'Brandschuttgräber'. Unfortunately, a definitive list of the nature of such deposits is not available at the time of writing as environmental sample reports are yet to be completed. The burials remain 'undefined' until sufficient data become available.

Deposition

Cremated bone deposits

It is impossible to understand 'burials' 21, 53, 72, 78, 80, and 98 any further as yet, as these contained cremated bone of unknown quantity, with no recorded evidence of associated pyre material, primary or secondary containers, or accessories of any sort; they may be deposits of pyre related material, or loose or bagged burials of various types. However, a number of other 'burials' (13, 19, 22, 35, 59, 67, 70, 71, 75, 84) may fall into the 'pyre related feature' or more specialised burial categories by virtue of being found to be mixed with noticeable amounts of carbon during the excavation. It may be significant that all in this group except 'burials' 19 and 22 are from the possible northern cluster (Group N), although more information would be required in

order to pursue this apparent patterning. Most of these features lack any further evidence their being deliberate burials of cremated human bone along with other pyre material; as such their type is 'undefined'; they cannot be analysed further here.

Burial 66 might also be such, or a disturbed 'Brandschüttungsgräb' (burial of sorted cremated bone as well as pyre material), as it was found to contain large fragments of a possible primary container (jar) mixed with the cremated bone in a charcoal rich deposit [1481]. The backfill of burial 34 seems to have consisted entirely of 'burnt deposits' [368], with the cremated bone placed in a jar, and burial 62 seems to have included an extra deposit of pyre material [1519] along with the sorted cremated bone (the latter again in a jar). These two burials seem more obvious candidates for being described as possible 'Brandschüttungsgräber' of the second century. Burials 66, 62 and 34 are all to be found in the eastern part of the excavated area, but are not adjacent.

Burial 28 (phase 2c) may never have contained any bone and therefore could have been some sort of 'cenotaph', but this feature was truncated to the south-east by another feature ('cremation 29', with only occasional flecks of bone in an otherwise quite sterile fill, not considered here as a cremation burial), and bone or a primary container may have been removed from its original context. There is no evidence of burial 49 containing any cremated bone, although this was probably disturbed. The remaining 59 burials seem to have focussed on sorted cremated bone, and must be considered thus until such time as further data become available.

The position of cremated bone within pits for the total of 63 reasonably certain cremation burials with bone now under consideration (shows a propensity toward central placement (represented by 40 burials), with unknown location making up the next highest group (nine burials), and some more occasional diversity (14 burials in total).

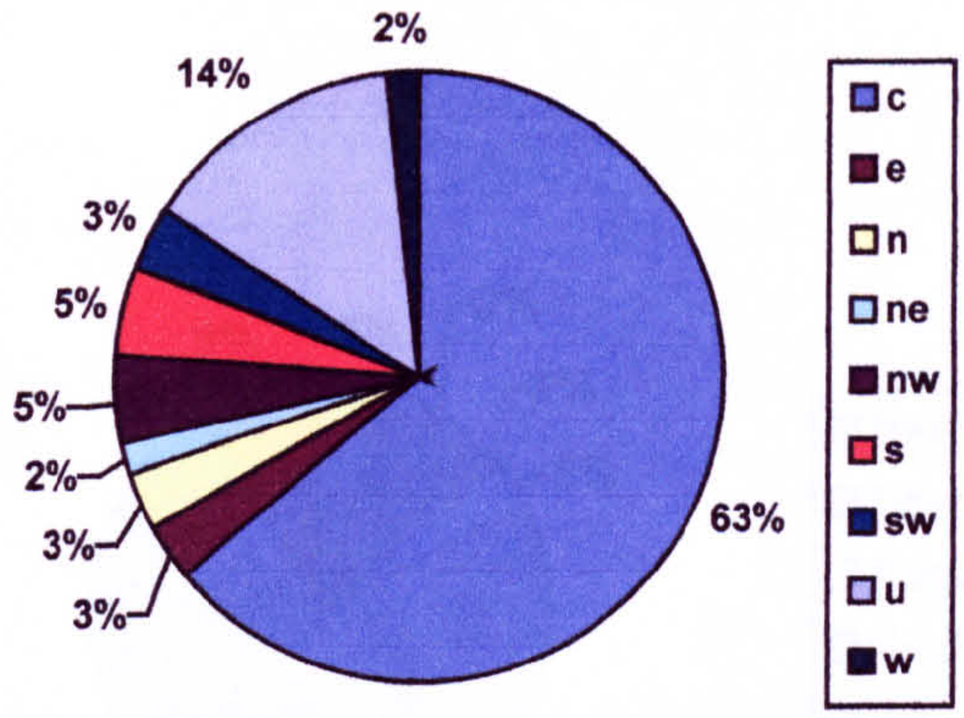

Figure 2.70: location of cremated bone deposits in pits at St. Dunstan's Terrace (n= 63)

Pit design

Due to the nature of the natural silty brickearth into which the burial pits had been cut, the stratigraphic report (Diack 2003) expresses some uncertainty as to whether the pits as excavated represent their original design, and this may account for the apparently high representation of centrally placed cremated bone deposits and primary containers noted above. However, from personal observation I would suggest that the majority of burials that were not heavily truncated by post-depositional processes (as well as the machine stripping of the site) were fairly convincingly excavated.

On the whole, burial pits seem to have been cut to a size that would adequately fit the contents upright (although quite tightly packed in some cases) on the base of the pit. The majority of the burial pits (57) were between 0.35m and 0.75m in diameter. The pit of the one 'amphora burial' (burial 56) seems to have been cut so as to fit the vessel (approximately 0.60m). 'Burial' 94, which may be a 'Brandgrubengräb', 'box burial' pyre related feature or even under pyre pit, had a rectangular cut approximately 1.00m in length and slightly less in width, with post-holes at each corner. Several burials were either smaller than 0.30m in diameter (4 [redeposited], 10, 96, 99) or more than up to 0.90m (1, 3 and 51, despite only having one accessory vessel at the most), but conditions of survival and recovery make these exceptions less likely to be significant.

Primary containers

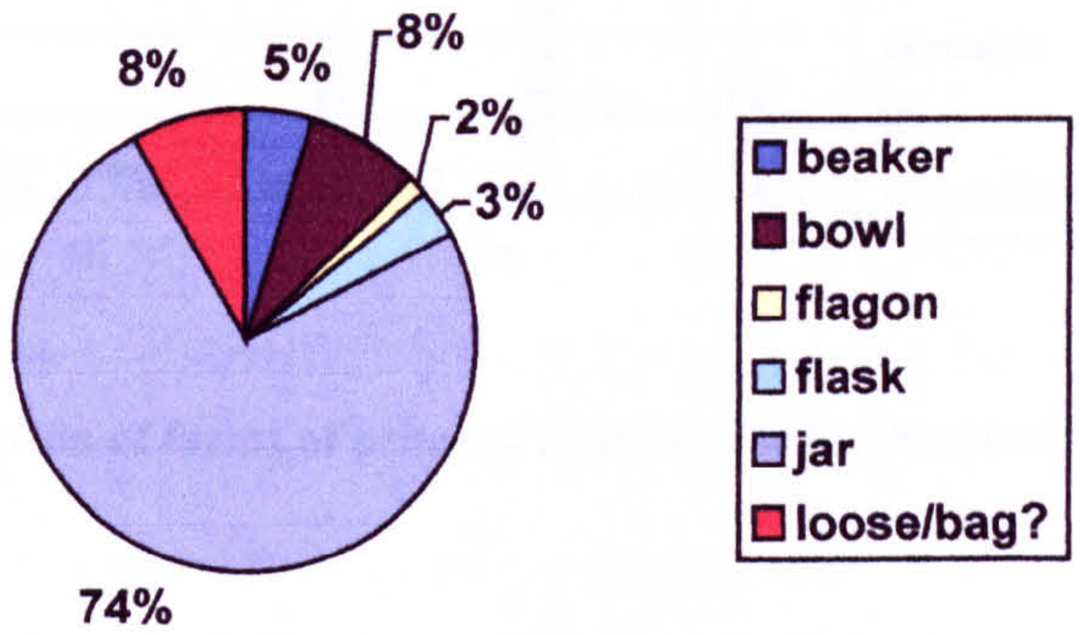

Figure 2.71: types of primary container at St. Dunstan's Terrace (n= 63)

Only five burials were either loose bone deposits or used organic containers such as bags, with the overwhelming majority of primary containers (58= 92%) being ceramic (appendix 4.1), and 47 being jar forms, five bowl forms, and in rarer cases beakers (three), flasks (two) and flagons (one).

If we consider the main phases (excluding late 'phases' 3a and 3c have one burial each [burials 33 and 90]), with a jar and a bowl used respectively) the use of beakers as primary containers (burials 5, 25 and 48) is clearly restricted to the earliest burials of the first century, while the very rare use of a flagon (burial 73) and flasks (burials 86 and 2) would appear to be later. Loose or bagged deposits are more common in the first century (burials 55, 68, 81 and 94; burials 55 and 94 may be a 'box burials', see below), but are still represented by one burial in the late second or early third century (burial 87). Sporadic (and still rare) use of the bowl form is represented in first and second centuries (burials 30, 79, 40 and 83).

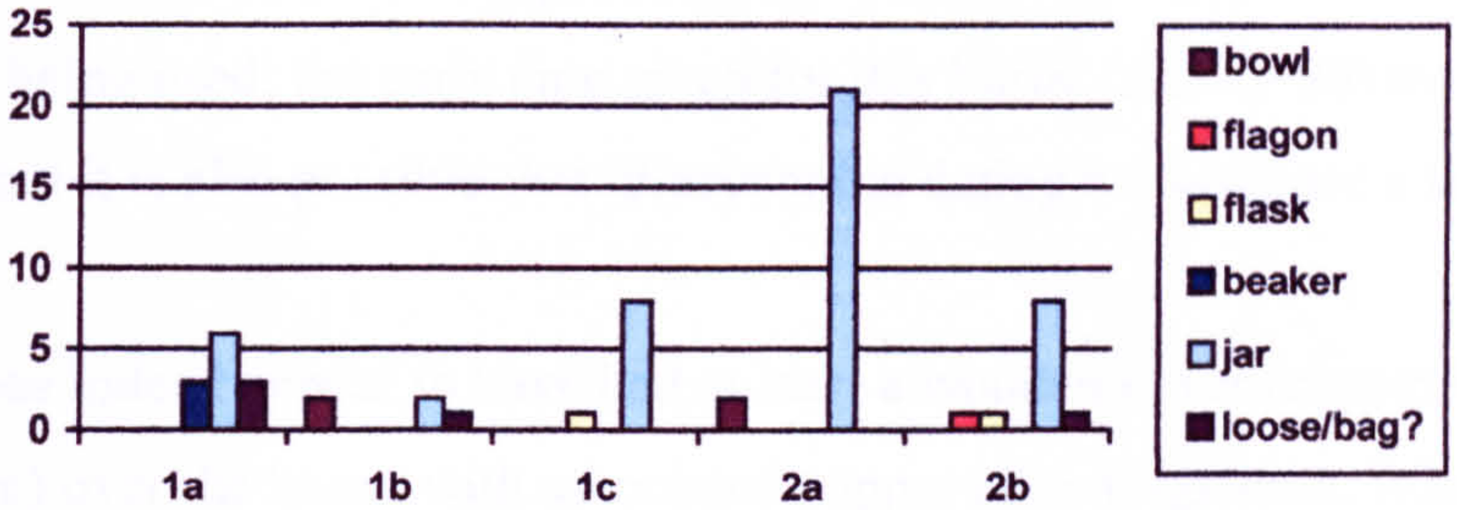

Figure 2.72: phased comparison of forms of primary container at St. Dunstan's Terrace (n= 60)

Figure 2.72 uses comparative graphs to demonstrate an apparent pattern of greater diversity of primary container in phases 1a and 1b, and increasing relative use of the jar form as a primary container, as the overall rate of burials increases into the second century: even though the jar tradition is increasingly dominant in the second century, there is still the odd exception to the rule. It may be significant that all the early burials using beakers are located in the southern Group S.

The flagon and probably the flasks used in burials 73, 86 and 2, were modified in order to place cremated bone deposits within. A graffito was noted (but not described) on the flask in burial 86. The jar in burial 9 was misfired, and that in burial 27 was a misfired and severely warped waster. The jar of burial 26 is notable for having two elongated stamps (not described) on the shoulder, and the jar in burial 65 had an apparently deliberately perforated base. We might wonder whether the purpose of the latter was associated with ceremony (allowing liquid to pass through?) or a matter of selection; either way it may have been significant that the vessel was damaged.

Secondary containers

Secondary containers appear to have been used in a distinct minority of cases on the site (appendix 4.2). The presence of decayed wood and a considerable number of copper alloy fittings (including domed studs, hinges and partial lock plate) in burial 50 led the small finds specialist to argue convincingly that this was a 'casket burial' (Bevan 2004). Burial 94 seems to have been contained within a box some 0.60m square (or a shuttered pit?), and various iron nails surrounding the jar in burial 63 may

suggest another box. Only one 'amphora burial' (burial 56) was found, with a Dressel 20 amphora being used; the early date given for this burial (AD70–90) may be significant, but it is also possible that idiosyncratic dating methods are a factor here.

Burial 55 does indeed appear to have had at least a wooden cover (approximately 0.30m square) over the bones with associated copper alloy fragments. Whether this constitutes a 'box' or 'casket' or simply a wooden cover is debatable, and the fact that the same dark material thought to represent the 'box' was not found under the cremated bone would tend to argue for the latter interpretation (although no remnants of the 'casket' of burial 50 were recorded from beneath its supposed contents either...).

The amphora of burial 56 was heavily truncated by machining, but must originally have been modified or already broken in order to have a large enough aperture for all associated contents that were placed inside (including the primary container, a jar). Not many diagnostic qualities could be reconstructed in the case of the putative wooden secondary containers from this site. The small box or cover in burial 55 only seemed to contain or cover the cremated bone deposit and only to partially cover other objects, and the possible casket in burial 50 apparently contained most objects, but not a flanged dish that had been placed on top.

Accessory vessels

Apart from a fairly consistent proportion of burials with no accessory vessels (appendix 4.3), there seems to have been an increase in numbers of accessory vessels deposited in line with an overall increase in burials in the second century; in phases 1a, 1b and 1c, fifteen burials had no accessory vessels, nine burials had one accessory vessel and only three burials had two, whereas in the second century and possibly into the early third ten burials had no accessory vessels, fifteen burials had one, six burials had two, five burials had three and two burials had four.

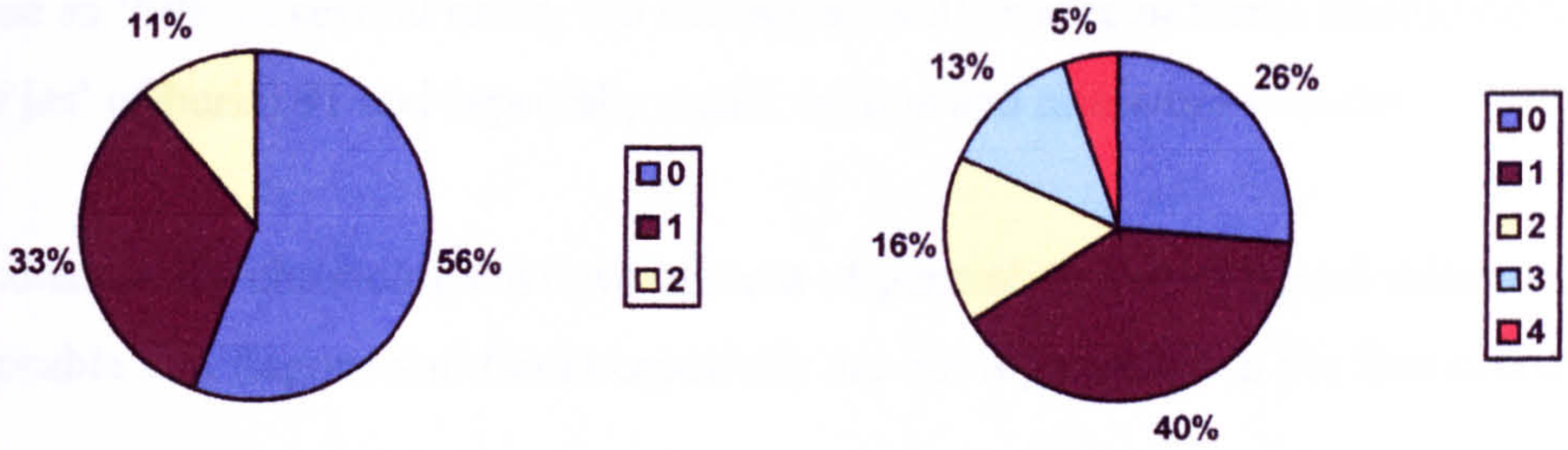

Figure 2.73: comparison of relative numbers of accessory vessels in phases 1a, 1b and 1c (left, n=27) and phases 2a, 2b, and 3 (right, n= 38) at St. Dunstan's Terrace

This pattern can be further qualified by the fact that of the three first century burials with two accessory vessels one used its accessory jar as a lid (burial 41) and another (which could be second century anyway) contained specialised vessels (burial 16). Possibly the very latest burial recorded (burial 90) contained no accessory vessels.

The 65 accessory vessels recorded included nineteen beakers, thirteen flagons, eight jars, seven dishes, eight miniature vessels (including three probable), four flasks, three bowls, two 'dog dishes' and a single 'honey jar'.

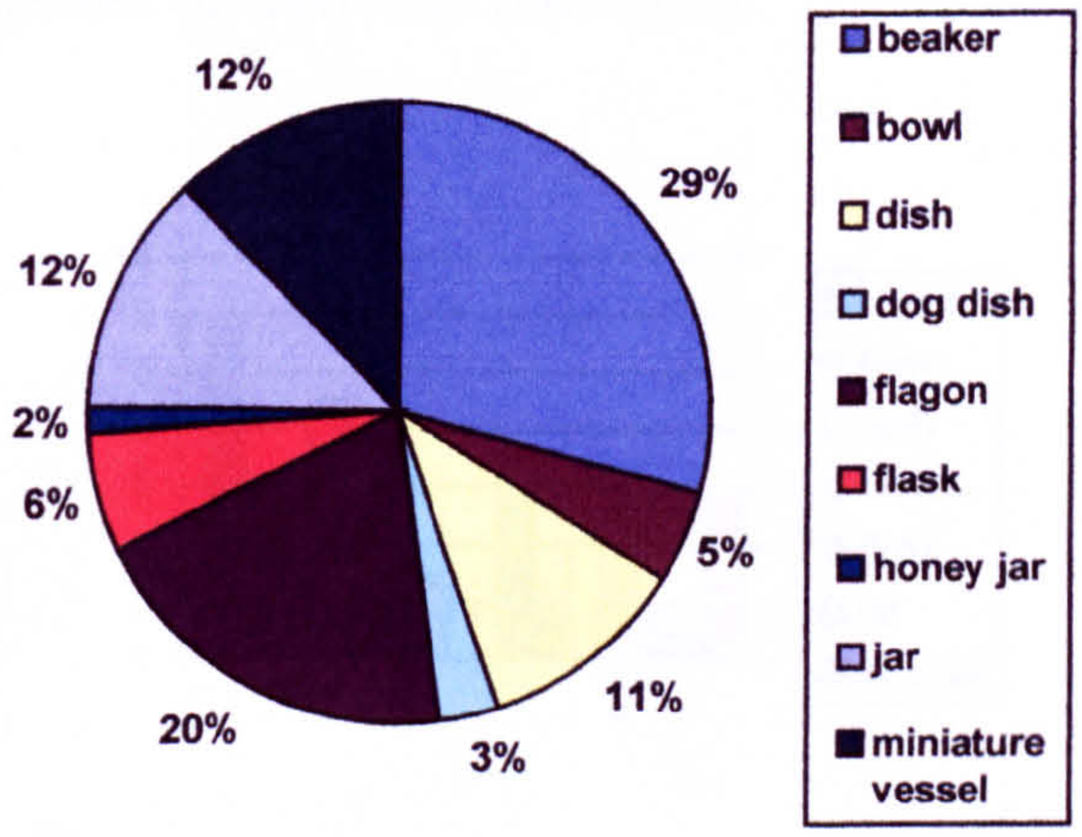

Figure 2.74: types of accessory vessels at St. Dunstan's Terrace (n= 65)

If figures for flagons and flasks as well as dishes and 'dog dishes' are elided, an overall predominance of drinking vessels, pouring vessels, and dish forms can once

again be detected. However, there are also a significant number of jars (qualified by their use as 'lids' in several cases, see below), as well as special forms (including the 'honey jar' of burial 91 and especially small, unique and miniature vessels).

If we consider the chronological development of general accessory vessel selection, it is noticeable that flagons and flasks especially are not represented in the first century.

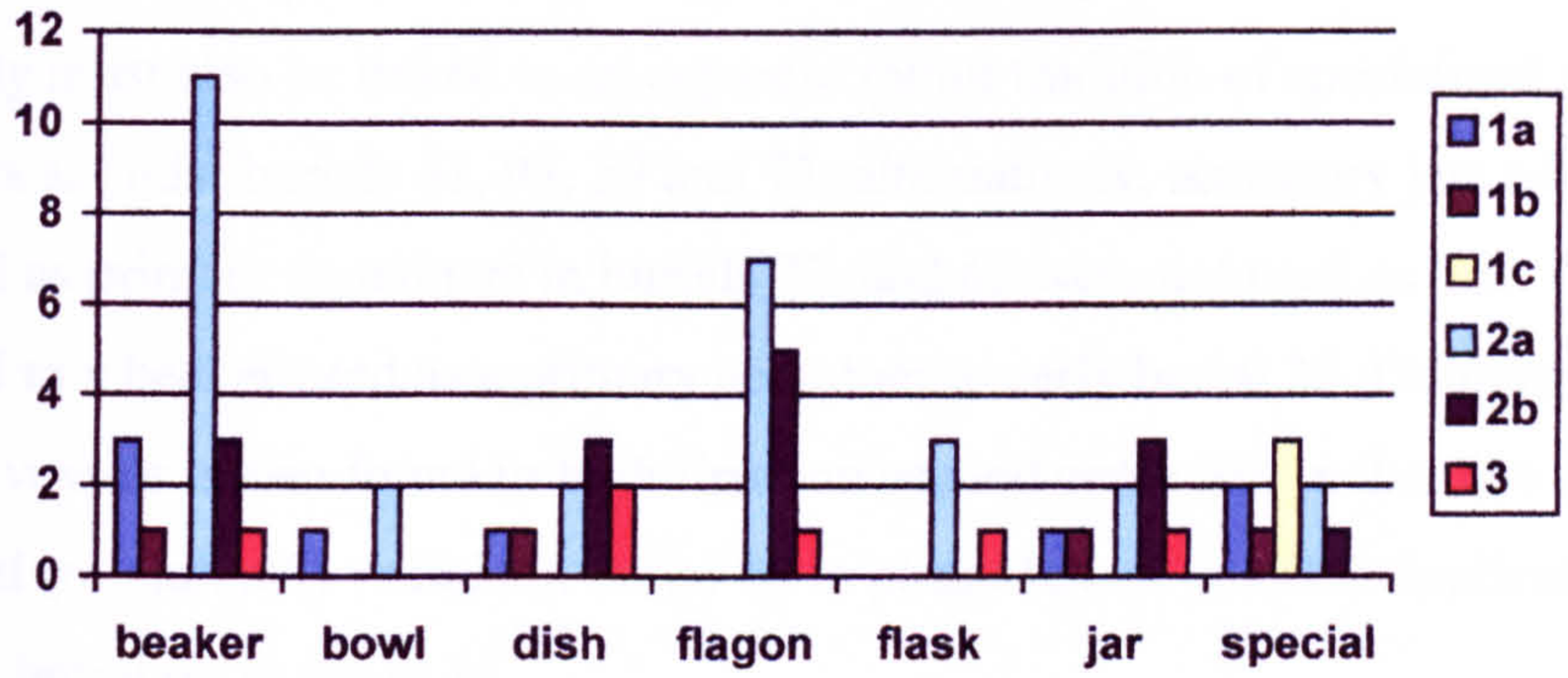

Figure 2.75: phasing of accessory vessel types at St. Dunstan's Terrace

If, furthermore, possible spatial sub-groups are analysed, a greater use of special forms is possibly indicated in the southern area (Group S) and perhaps of jars especially in the suggested northern area (Group N).

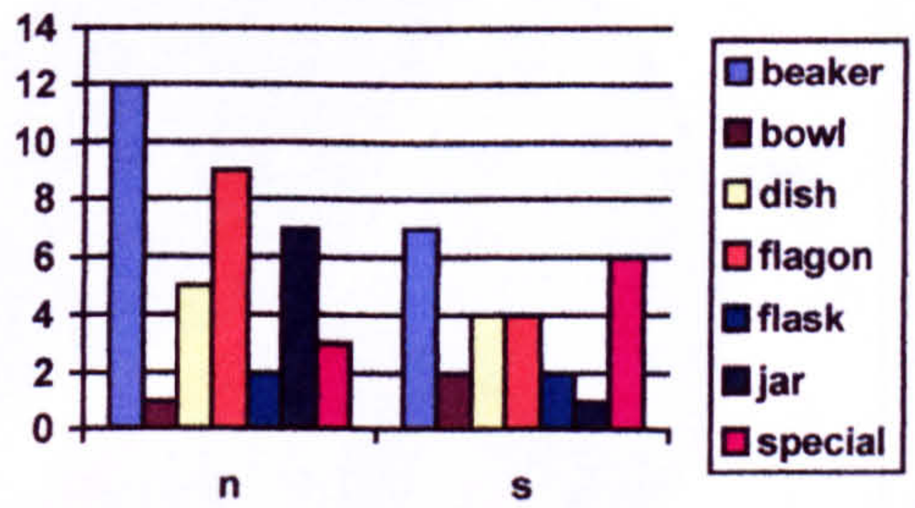

Figure 2.76: accessory vessel types by possible spatial sub-groups 'n' (n= 39) and 's' (n= 26) at St. Dunstan's Terrace

Although somewhat tenuous, such findings would seem to concur with overall dating of the burials and therefore perhaps chronological development of the depositional

stage of the mortuary sequence, with special vessel types being perhaps more likely to be associated with smaller numbers of accessory vessels in the first century, and the use of jars with increasing numbers of burials (as well as numbers of accessory vessels per burial) in the second century (it might be remembered that the use of beaker forms as primary containers is also restricted to the first century and also possible Group S).

However, numbers of jars, and the increased number of jars in the second century particularly must also be linked to an apparent minor tradition of specialised use of second jars as 'lids' burials 41, 93, 57 and 73; alternatively, accessory jars added to those used as primary containers in burials 77, and 65 were not used as lids. A beaker was added to a beaker used as a primary container in early burial 25. Doubling of accessory vessels is also found in both first and second centuries, in the case of the two special (miniature?) vessels in burial 16 in phase 1c and possible duplication of beakers in burial 60 in phase 2a.

But assemblage level statistics above mask considerable diversity in terms of the combinations of accessory vessels included in each burial (see Figure 2.77, which for clarity does not include the 25 burials with no recorded accessory vessels).

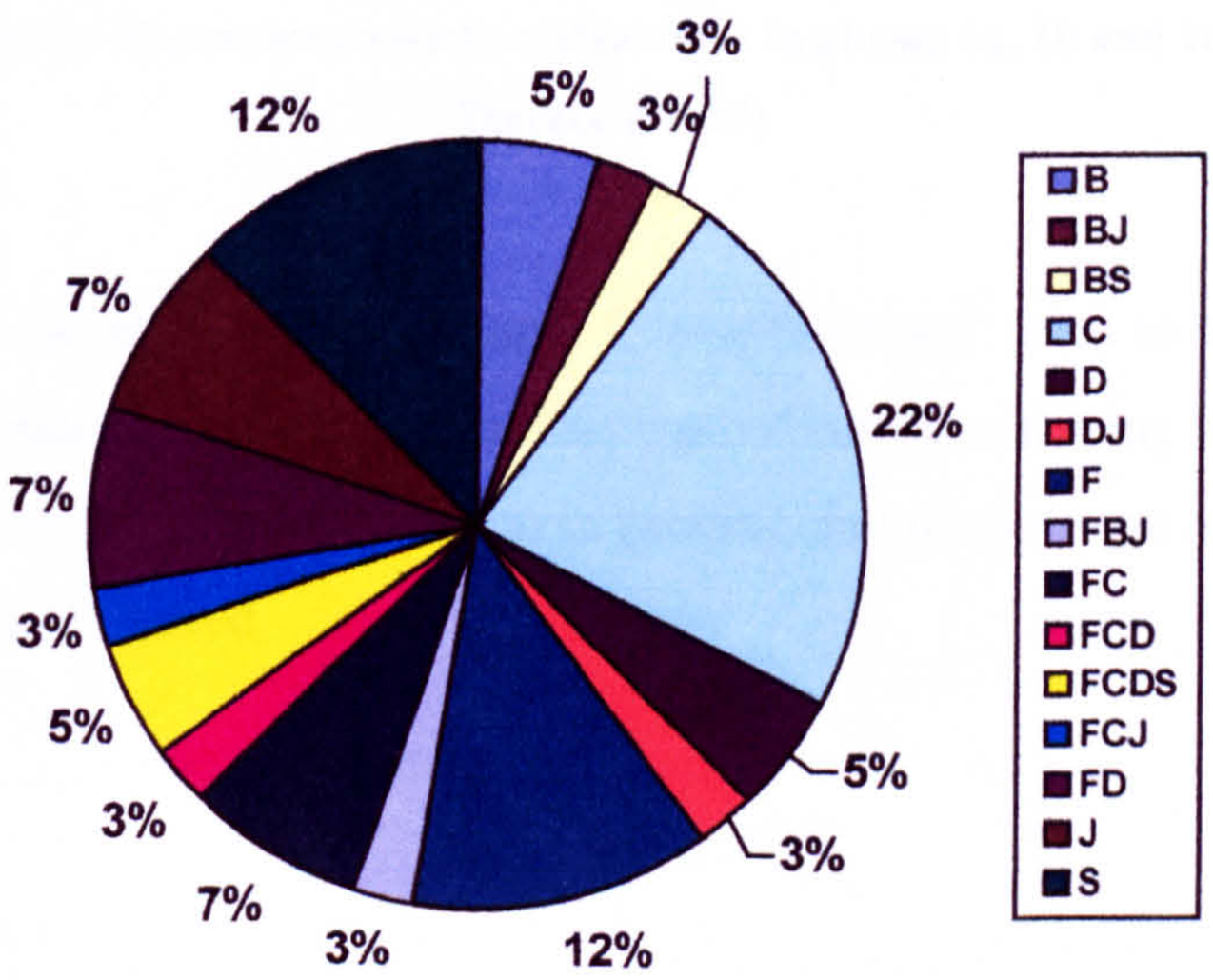

Figure 2.77: overall diversity of accessory vessel combination at St. Dunstan's Terrace (n= 40)

There would clearly seem to be a significant group of burials that include only drinking forms (C=9), and slightly less prominent groups with just pouring forms (F=5), which contribute to the relatively high numbers of such vessels in the general assemblage; the five burials that only have a special form are also noticeable (S=5). But beyond these relatively small groups there would still seem to be considerable improvisation of this component of the ritual sequence, with a total of sixteen 'combinations' (if burials with no accessory vessels are included) apparently generally scattered among the 65 burials.

Moreover, while a majority of 25 burials with no accessory vessels provide the background, diversity would seem also to be phased, with variability increasing in line with the established pattern of increasing overall numbers of cremation burials in the second century.

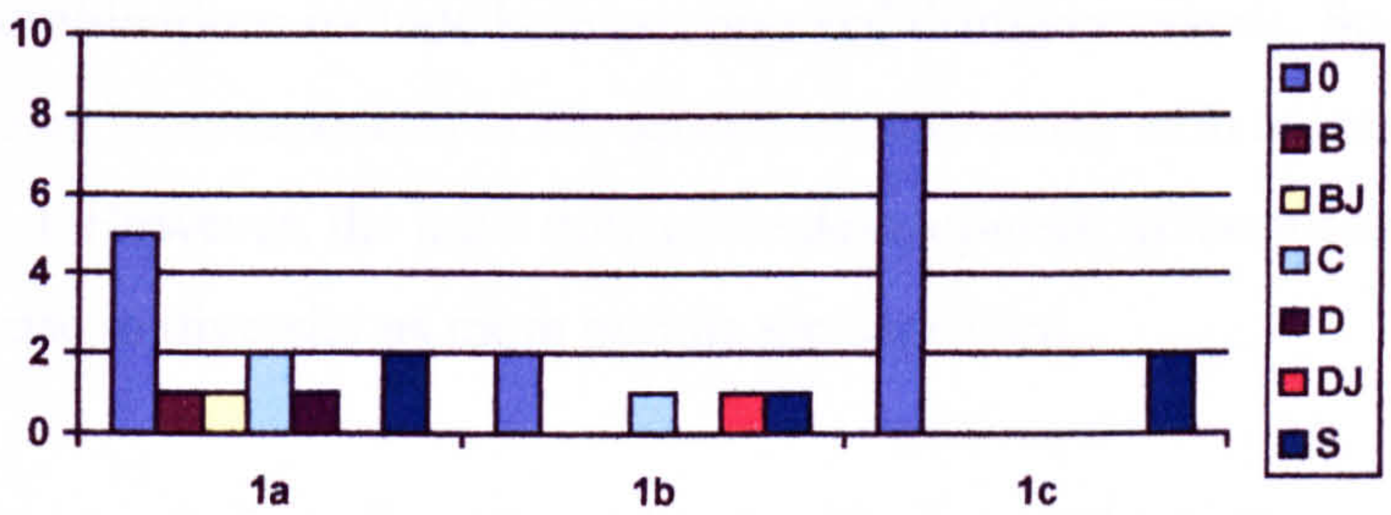

Figure 2.78: diversity of accessory vessel combinations in phases 1a, 1b and 1c at St. Dunstan's Terrace (n= 27)

Some patterning can be suggested. Simple C 'combinations' seem to be represented throughout the phases, with numbers of this type of burial increasing in the second century in line with increased deposition in general, and so represent something of a possible tradition, if limited.

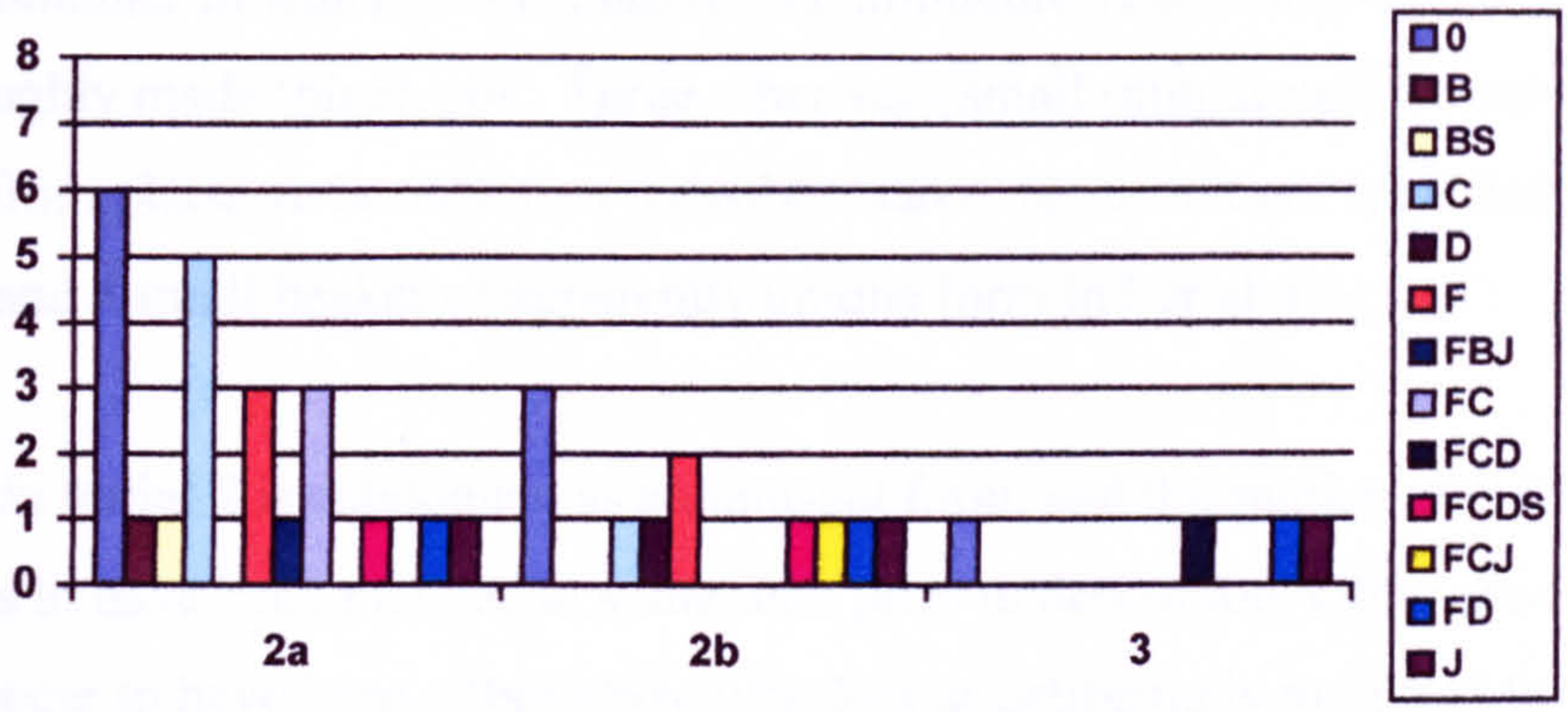

Figure 2.79: diversity of accessory vessel combinations in phases 2a, 2b and 3 at St. Dunstan's Terrace (n= 38)

It is noticeable that simple F 'combinations' form a significant proportion of burials that start using this form of vessel from the second century, and many of the more complicated combinations include both pouring and drinking vessels. Special forms only seem to have been deposited in the second century along with at least one other accessory vessel. However, the most noticeable development in the second century is a general increase in diversity as more burials are deposited.

All four samian vessels from the site can be classified as 'dishes'; the earliest, clearly distinguishing burial 55 from others of this phase, is a Drag.18 dish with an abraded stamp. Only in the second century does this apparently rare selection of samian 'resume', with a Drag. 36 dish in burial 40, and a Drag.18/31 dish with an abraded stamp in burial 62 (phase 2b; actually, this was possibly used as a 'lid', see below). Finally one of the two fairly certain third century burials (33) contained a Drag. 33 'platter'(actually a cup form). Most of these (admittedly few) dishes are found among the generally more diverse later burials. If 'dog dishes' are included more than half of the dishes (five) and all of the bowls (three) from the assemblage are of non-samian and relatively local manufacture. Drinking vessels are all beakers.

Nine special forms of accessory vessel include a two handled 'honey jar' in early burial 91, and five miniature vessels in burials 81, 30, 36, 50 and 62 (the latter three deposited in the second century). Vessels in burial 81 and 36 were jar forms, the former with a 'tiny' neck cordon, the latter almost exactly emulating in miniature the

primary container in which it was placed. The miniature vessel from burial 30 appears to be a roughly made 'pinch pot'. Three other very small (miniature?) vessels are also recorded from phase 1c burials: two (possibly beaker forms but not specified) in burial 16 and a small beaker of apparently unique form in burial 49.

The flask in burial 7 is catalogued as an unusual form, and the samian dish in burial 40 appears to have been mended at some time prior to deposition. Other accessory vessels appear to have been either already broken or deliberately modified for this specialised use. Beakers from burials 9 and 10 had apparently deliberately perforated bases when deposited (cf. the jar used as a primary container in burial 65), while that in burial 50 had a perforated side.

Jars in burials 41, 93, 57 and 73, all 'duplications' of jar forms either used as primary containers (41, 57, 93) or other accessory vessels (73) in their respective burials, all seem to have been modified to act as 'lids'; the latter jar is also an under-fired waster (this burial was further diversified through its use of a modified flagon as a primary container). On the other hand the flagon in burial 7 had apparently also been modified to act as a lid for a jar.

The provenance of at least two of the accessory vessels in 'casket burial' 50 may also be particularly significant (apart from apparent modification and special selection, see above), as the colour coated beaker and globular flagon appear to be Colchester products. The only non-samian import is apparently the small beaker in burial 45 from north-east Gaul.

An almost entirely diverse pattern of orientation of accessory vessel types in relation to the cremated bone deposit again suggests that this was not a significant aspect of location of placement. In terms of more complex spatial arrangements, it has already noted that jars in burials 41, 93, 57 and 73, the samian dish in burial 62 and the flagon in burial 7 had been used as 'lids' for primary containers. Dishes had also apparently been used in this way in burial 2, and possibly in 'casket burial' 50, where large flanged bowl seems to have been placed above all other contents, although this is of particular interest as we might have expected a 'casket' to have its own lid by

definition. Clearly some other explanations might be offered in this case. Jars in burials 41, 57 and 73, as well as the flagon in burial 7, were inverted.

Special forms were frequently deposited within the primary container on the surface of cremated bone; this was the case with the 'honey jar' in burial 91, the two small vessels, and miniature vessels in burials 36, 50 and 62. A relatively small bowl had also been in placed in this manner in burial 41. The flagon and beaker in burial 50 had apparently also been placed within the 'casket' in that burial.

Other accessories

With the total of 26 other accessories (from a secure burial context, burials 4 [redeposited] and 28 [truncated] are excluded from these analyses), a distinct chronological pattern is evident (appendix 4.4); four of the earlier burials (burial 56 with one other accessory, burials 55, 91 and 94 with two each) are distinguished in this way, with an increase in the numbers of other accessories per burial, as well as slight increase in diversity, associated with an overall increase in the numbers of burials in the second century.

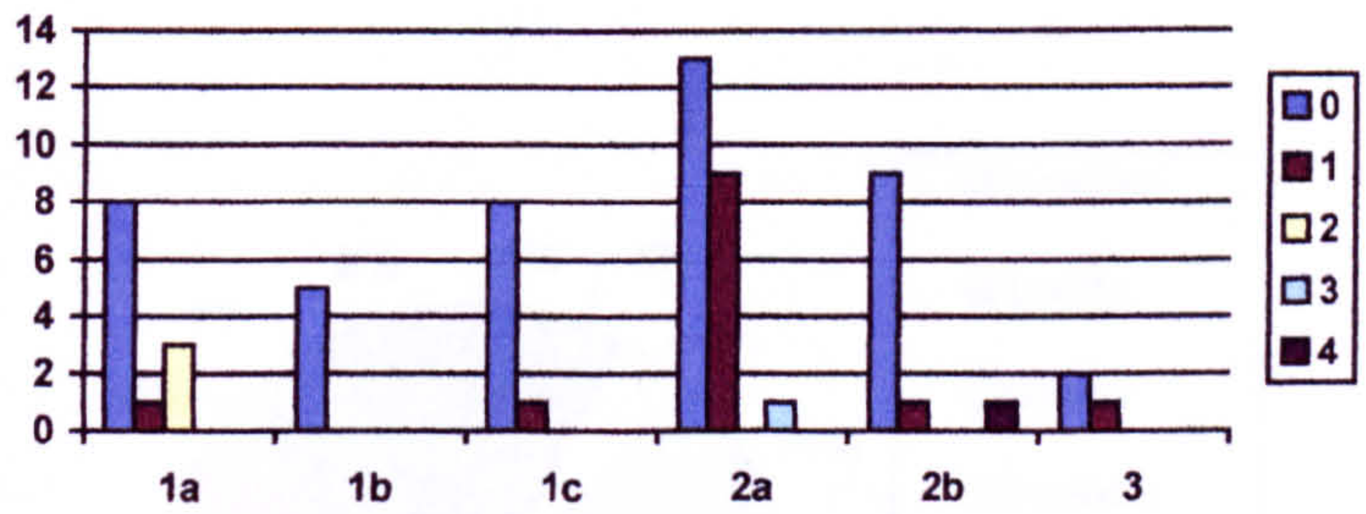

Figure 2.80: phased numbers of other accessories at St. Dunstan's Terrace (n= 63)

It is notable that three of the earlier burials with other accessories are those apparently elaborated in terms of secondary containers, these being wooden in the cases of burials 55 (possibly a wooden cover for the burial) and 94 (either a box or a wood shuttered pit), and a modified amphora in the case of burial 56.

Footwear, securely present in fifteen burials out of 65, is the most common type, and surely represents something of a tradition; numbers of burials definitely including footwear seem to rise proportionally in association with increased numbers of burials overall, suggesting that a certain group of the cremated and buried population is represented throughout the phases (although again whether this group was defined by wealth, social status, age, gender, occupation etc is so far unknowable).[12]

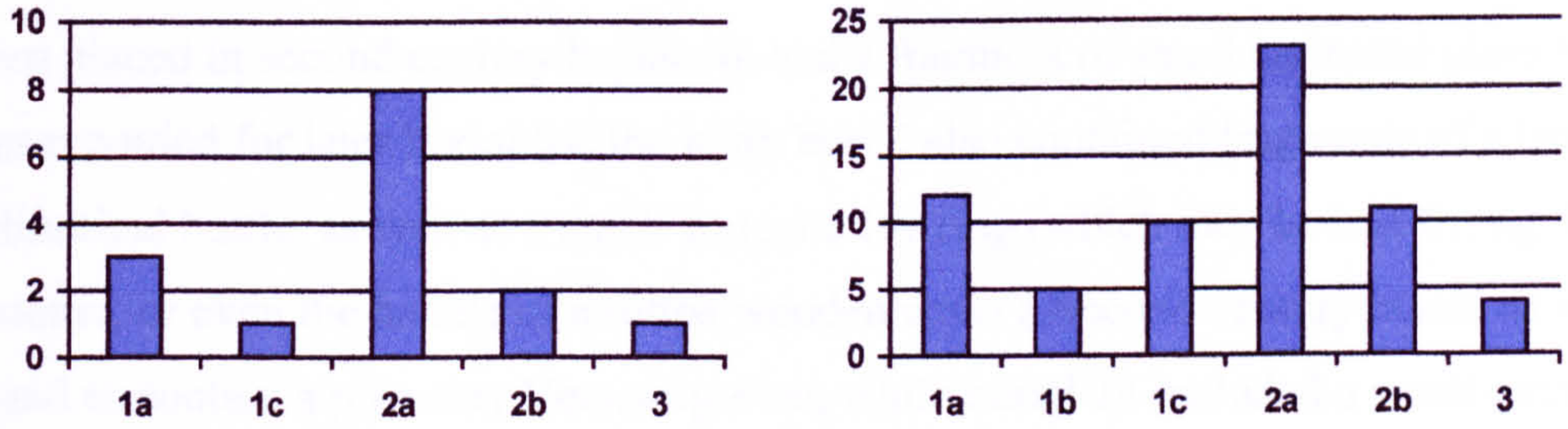

Figure 2.81: phased inclusion of footwear (left, n= 15) compared with overall phasing of burial numbers (right, n= 65)

Beyond this possible tradition, the remaining types of other accessory included represent diversity and possibly increasing personalisation, especially when the fact that of the three brooches recorded two come from the same burial (burial 91).

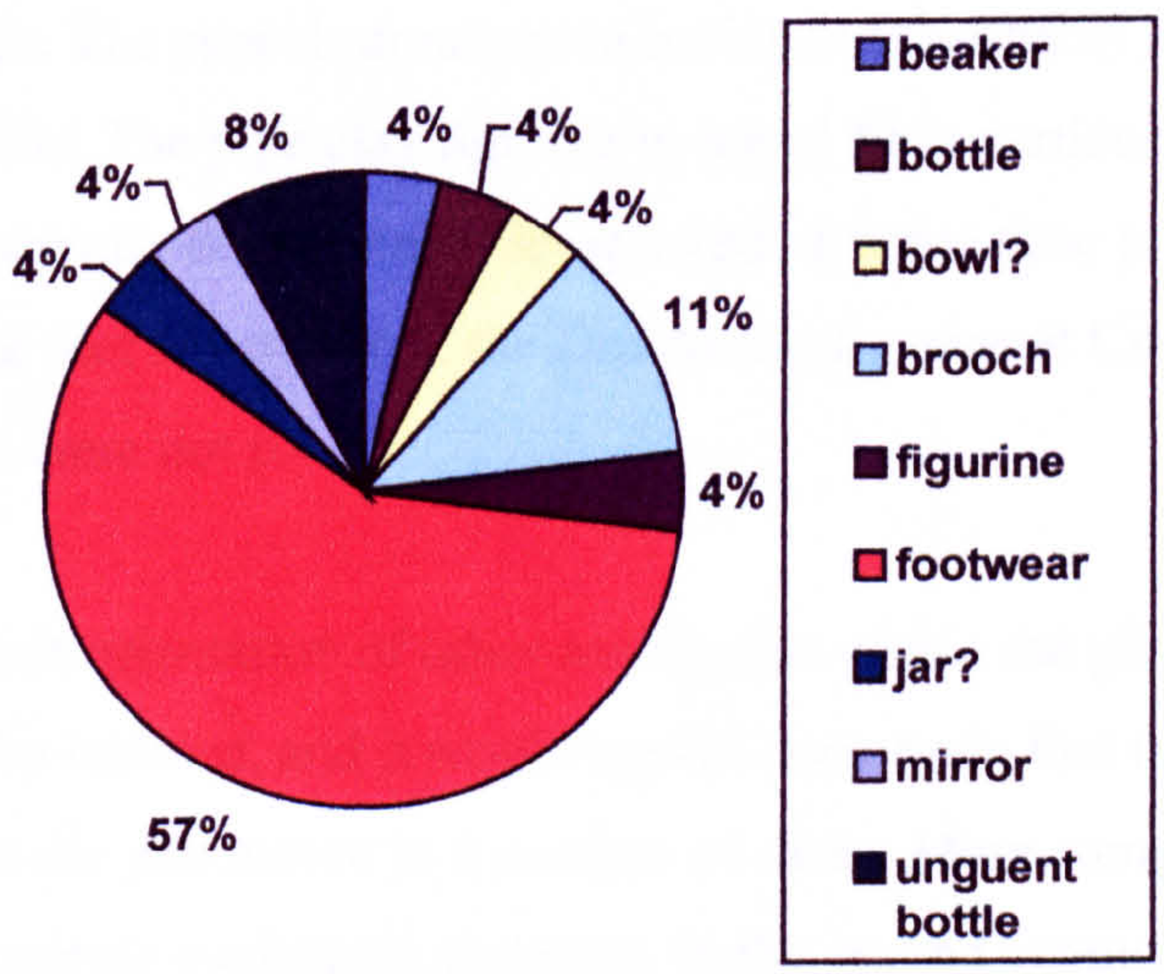

Figure 2.82: types of other accessories at St. Dunstan's Terrace (n= 26)

[12] Sex and age patterning on forthcoming cremated bone analyses may throw some more light on this.

Other duplicated types of objects were deposited sporadically in separate phases; the two 'unguent bottles' for example were recorded both for the early possible 'box burial' 94 (probably phase 1a) and later burial 87 (phase 2b). Again, the only other burial with a brooch (burial 40) was second century and a different brooch type to those of the early burial 91.

Small glass vessels other than 'unguent bottles' were also deposited. The early burial 55 was further specialised by the inclusion of a small glass beaker, a possible jar had been placed in second century burial 40, and a fragment of small carinated glass bowl was recorded for later burial 84; the latter burial also contained fragments of a large cylindrical bottle, as well as a small copper alloy ring (which may be box fitting, bag fastener, or even the handle of a rotted wooden cover). Second century burial 61 was found to contain a pipe clay Venus figurine, while burial 14 included a small circular copper alloy mirror.

The rim of the small glass beaker in early burial 55 seems to have been broken in antiquity at the point where it was covered by the putative 'box' (more likely a wooden cover) in this burial; the missing rim fragments were found underneath the other edge of the cover to the south, perhaps suggesting that the break occurred when the burial was revisited and the cover lifted, after initial deposition. Both brooches of burial 91 were bow brooches, but of different types, while the brooch in later burial 40 was a disk brooch. The speculum mirror in burial 14 is probably an import, and seems to lack a handle. The pipe clay figurine in burial 61 is particularly noteworthy for having been apparently deliberately 'decapitated' at some time prior to deposition, as well as having the feet removed (cf. the *Dea Nutrix* figurine at Cranmer House, Chapter 7). The feet were not found.

No apparent pattern of orientation of other accessories within the pit in relation to the cremated bone can be isolated, and it would appear once again that more complex spatial arrangements are paramount in a number of cases. More complex arrangements are however once again apparent. In the second century, in no less than five burials (23, 43, 1 and 65) the shoes or boots have been placed so as to be flanking the primary container of the cremated bone deposit; but another interesting configuration is also apparent here in at least six burials throughout the phases, where

footwear appears to have been placed so as to be overlapping (burials 55, 56, 94, 9, 47 and 87). Most of the latter are completely overlapping, while footwear burial 94 appeared to have overlapping heels, and the shoes or boots in burial 47 overlapping toes; in this burial the overlapped footwear also flanked the primary container. Footwear in other burials was too disturbed to reconstruct any possible 'formations'.

The two brooches in burial 91 seem to have been placed on the base of the pit, outside and to the west of the primary container, while that in burial 40 was found above the primary container, a bowl, and may originally have been placed on the cremated bone therein. The body of the pipe clay Venus figurine in burial 61 was inverted and located to the north-east of the primary container, while the head was separate and to the north. 'Unguent bottles' and all other small glass bottles seem all to have been placed outside primary containers, although this is difficult to establish with the possible 'box burial' 94. Finally in this area, the mirror in burial 14 was found tilted and resting to the side of the primary container, and perhaps may have originally acted as a 'lid' above cremated remains.

Combined selection

A phased codification of combinations of deposited objects (see figure 1.17, Chapter 4 and notes to appendices), in burials where this is possible, appears to demonstrate a definite chronological pattern (appendix 4.0), with some deviation from the most 'straightforward' profile in the earliest phase (primary container diversity is especially noticeable).

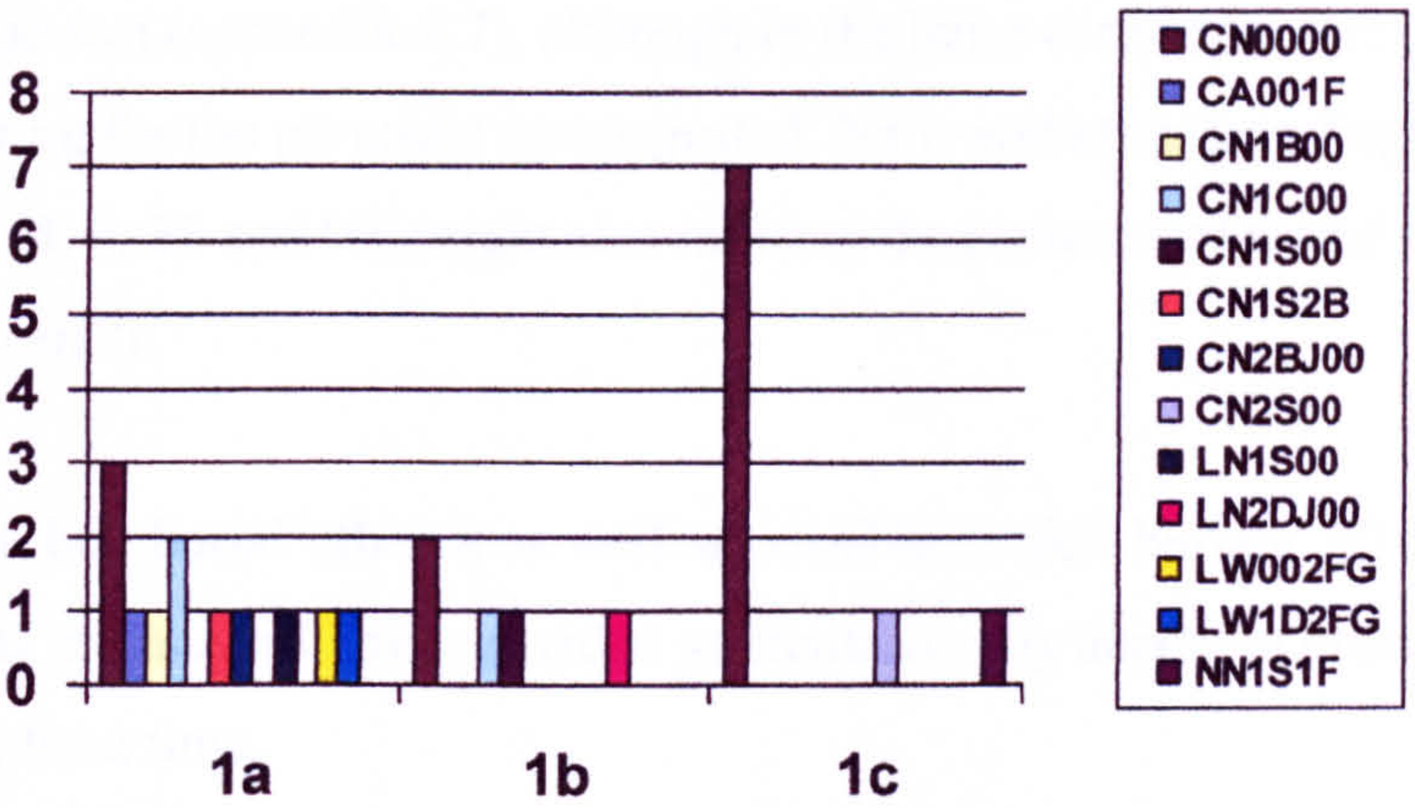

Figure 2.83: diversity of combined selection in phases 1a–1c at St. Dunstan's Terrace (n= 26)

The CN0000 profile still seems to maintain its position as overall numbers of burials increase from the second century, but levels of diversity and numbers of diversifications are also markedly increased from this time, suggesting a growing tradition of specialisation.

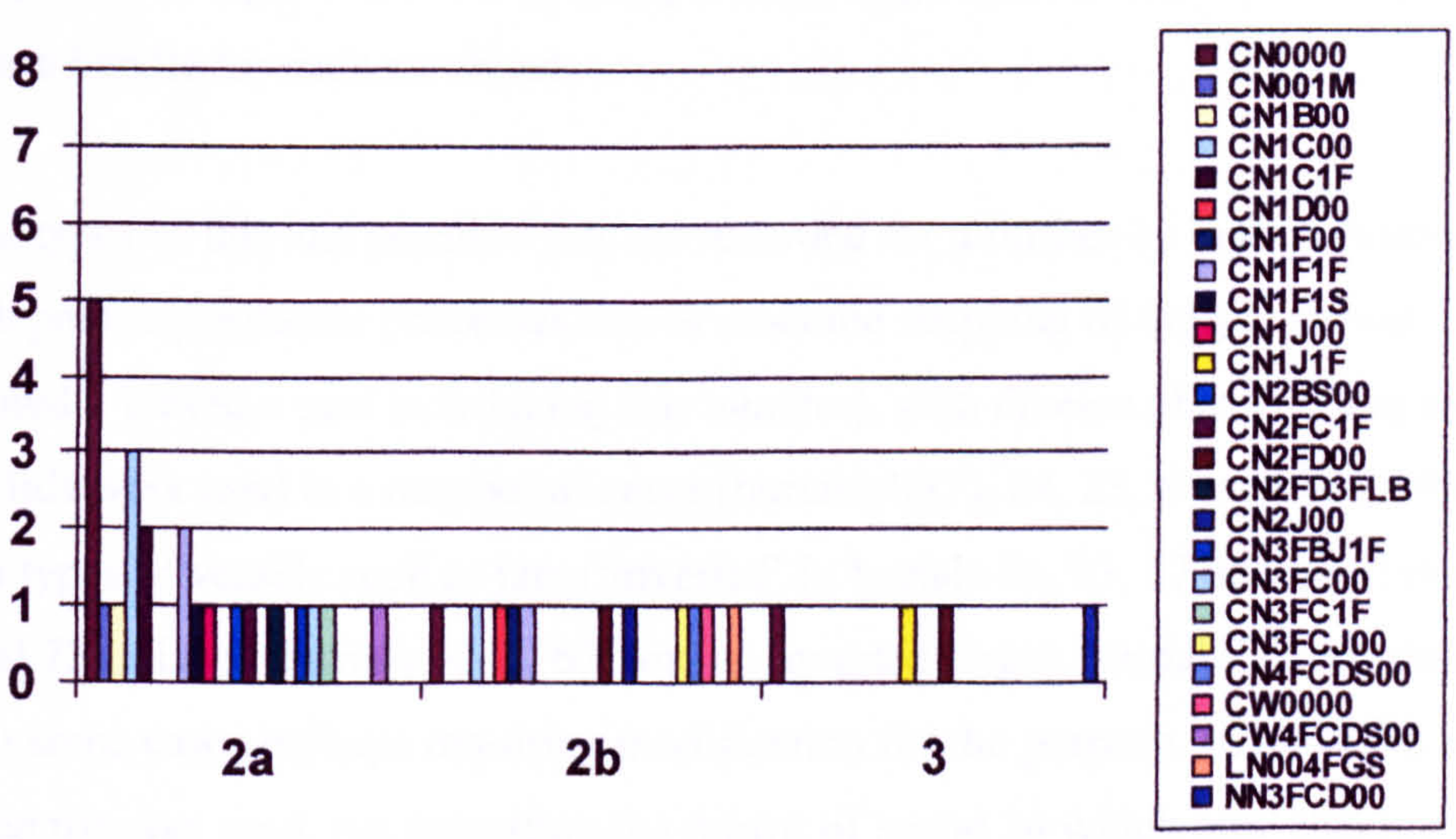

Figure 2.84: diversity of combined selection in phases 2a–3 at St. Dunstan's Terrace (n= 38)

Post-depositional or secondary rites, redeposition

The fact that so few cremation burials were found to inter-cut on this site (only 9 of 97 'cremations') might testify to there being some sort of marking of burials and therefore some opportunity for continued access to particular burial sites; in fact patterns of stake-holes (burials 91 and 33) and post-holes (burial 94) may result from

markers of some sort (appendix 4.7), although in the latter case some sort of structure, perhaps shuttering for the pit might be suggested. Nails and other iron fragments in several burials (3, 7, 88 and 90) might also indicate the presence of rotted wooden markers (or covers?).

If burial 94 is a 'box burial', then it as well as possible 'casket burials' 50 and 55, and 'amphora burial' 56 may all have provided particularly easy access in order to revisit burials, at least for a time.

However, as has already been suggested, the wood in burial 55 is more convincingly described as a wooden cover or 'lid' over the cremated bone, as glass beaker, footwear and samian vessel are not contained, and no trace of the replaced wood was found beneath the bone deposit. Moreover, the beaker seems to have been damaged, perhaps through lifting and replacement of the putative wooden cover after initial deposition. Another wooden cover is probable in the case of burial 76 of the second century, and we might wonder if the copper alloy ring from burial 87 at some point acted as a handle for such an object.

Various types of lids and possible lids are recorded for a further 16 burials (truncation through post-depositional processes and/or machine stripping of the site almost undoubtedly played a part in reducing this number), with diverse objects being used. Actual lids were used in a number of cases (burials 46(?), 64, 23, 60 and 85), while various types of vessels such as jars ('inverted' in burials 41, 93, 57 and not 'inverted' in burial 73), dishes (burials 50, 2, 62) and an inverted flagon (burial 7) were also used, in some cases perhaps requiring modification for the purpose. In burial 45 a modified tile was used, not forgetting the mirror of burial 14 which may also have served this purpose. The only burials with 'lids' certainly of first century date are burials 55 and 41, although comparatively lower numbers of burials from this period combined with truncation of contexts is probably the most important factor here.

We might note that the dish in 'casket burial' 50 would seem to be 'surplus to requirements' as a 'lid'. Was the vessel used for some other form of secondary action? Miniature vessels placed within primary containers might also be considered in this light (in the case of the 'honey jar' in burial 91, the two small vessels, and

miniature vessels in burials 36, 62, and also in burial 50). Finally it seems probable that 'cremation 4' found within the upper levels of silting of the boundary ditch, was at some time disturbed and redeposited.

Profile

Possible site level traditions

Clearly the majority of burials would seem to be of sorted cremated bone (although some possible exceptions have been noted, see below, and many of the aceramic features on the site are yet to be reported in detail). Of the 65 burials considered here the overwhelming majority use ceramic vessels as primary containers, and a large majority of these are jar forms. The majority of burials were not provided with accessory vessels, but where present, pouring, drinking and dish forms are the most highly represented of the overall assemblage, although jars and special forms are also represented in relatively high numbers. The majority of burials have no other accessories, but footwear is found in a significant minority of burials throughout the phases, and often seem to have been arranged so as to be flanking the cremated bone or overlapping (or in one case both). The location of objects in relation to the cremated bone deposit on the horizontal axis seems to have been completely diverse and not significant. It seems likely that there is a tradition of marking burials, and therefore perhaps revisiting them after initial deposition.

Chronological patterns

There is a notable diversity in primary containers in the first century (beakers, loose/bagged, bowls as well as jars), and a limited number of accessory vessels, although some burials were particularly elaborated by inclusion of rare accessory vessels and/or other accessories (burials 55, 56, 94 and 91). Three of these more elaborate burials also formed the majority with possible or certain secondary containers, suggesting that this form of elaboration was primarily a first century phenomenon. The same can be said for the inclusion of special forms of accessory vessel, particularly where these were the only accessory vessels included.

In the second century the numbers of burials increased, the tradition of using a jar form as a primary container 'took off', the numbers of burials with accessory vessels, the average numbers of accessory vessels per burial, as well as diversity in types and combinations of accessory vessels and other accessories all seem to have increased.

Spatial sub-groups

The spatial patterning of the site is as yet unknown, although two broad and approximate linear clusters to north and south (here called Groups N and S) can be suggested. This site would be an excellent candidate for testing of a more detailed spatial analysis based on a small scale 'GIS' in order to create site plans reflecting facets of the site profile. Some suggestion can be made that the southern part of the site (Group S) was used more in the first century.

Sex/age groups

No details are available at the time of writing; it is possible that such information might help to further qualify 'other groups'.

Other groups

Some possible 'Brandschuttgräber' have been noted, but further analysis of cremated bone and environmental samples of burial pit 'backfills' is required in order to develop a clearer understanding of this aspect; two burials may not have contained any bone, but disturbance is also a likely explanation.

A number of the early burials (by virtue of elaboration of certain accessory vessels and other accessories perhaps), as well as burials either with no accessory vessels or other accessories, or with specially placed footwear throughout the phases, seem to represent particular but otherwise indefinable groups in the cremated and buried population.

Burial level diversity

There is considerable diversity and therefore perhaps specialisation of deposition throughout the phases, in terms of types of secondary containers, and types and combinations of accessory vessels and other accessories (and perhaps the choice of object for use as a lid), and overall combinations of numbers and types of deposited objects; this diversity seems to be emphasised by being particularly noticeable in the second century, when there are not only more burials, but a higher proportion of burials with accessory vessels and other accessories, and a greater number of different combinations. A considerable number of items (especially other accessories) are found to be unique for the site, and a sizeable number of burials where accessory vessels and/or other accessories have been deposited are found to be unique in their combination of those objects. This diversity is further emphasised if matters of specialised selection, modification or complex spatial arrangements are taken into account.

Site profile

While certain traditions (such as jar forms for primary vessels, large numbers of burials with no accessories, and (restricted) inclusion of footwear) are clear, the diversity of burial is apparent among the earliest burials in terms of primary and secondary containers as well as accessories, and appears to increase, especially with accessory vessel and other accessory types and combinations, as burial apparently becomes more widely used/available in the second century.

Local profile

Much of the earlier finds in the St. Dunstan's area (appendix 7.2) are only partially useful as comparative material, being subject to the various constraints of excavation circumstance and/or excavator bias (Brent 1861; Pilbrow 1882; VCH 3 Kent, 1932, 75–80; Bennett *et al* 1982; Philpott 1991). Unfortunately, such problems have also benighted more recent finds in St. Dunstan's particular, such as the remains of four burials 'truncated' by a trench opposite numbers 5–7, New Street (Bennett 1986), of which no further details are available, and '(A)t least seven vessels', apparently

representing three burials associated with a glass phial and two glass gaming counters, recovered from workmen's skip at 5, New Street (Taylor 1985 see also Bennett *et al* 1980). Only approximately nine burials reported from earlier excavation (or rather watching briefs) associated with the building of the Telephone Repeater Station on the St. Dunstan's Terrace site, therefore (Whiting 1927), and a single cremation burial at 30, North Lane, Canterbury (Leggatt 1991; Anderson 1991), provide secure comparative material for the St. Dunstan's cemetery area. Some further comparisons can be made with burials from the other Canterbury cemetery areas, however.

The profiles of deposition from St. Dunstan's Terrace and Cranmer House are strikingly similar in a number of ways (despite the difficulties of the Cranmer House site, as well as different attitudes on the part of respective excavators and specialists). Both sites show an increase in the number of burials in the second centuries, both a primary container tradition of jar forms with minor variations of flagons, bowls and loose/bagged deposits (there is a more noticeable chronological element to this at St Dunstan's Terrace, but this may be due to more data being available). Loose or bagged deposits are probably more likely to be absent from Cranmer House and earlier archaeological finds in the area as a result of excavation bias and circumstances.

Levels of secondary container selection are similar at St. Dunstan's Terrace and Cranmer House, although the first century dating of most of these at St Dunstan's Terrace seems a minor variant (in the case of the 'amphora burial' this might be a matter of specialist dating criteria). The containing of all deposited objects within respective amphorae is a constant (note however the diverse use of a ceramic primary container in the St Dunstan's Terrace example). No burials with secondary containers are reported from other St. Dunstan's sites, but burials using various types, often associated with considerable numbers of accessory vessels and/or other accessories, have been recorded at various times elsewhere in Canterbury. These include amphora burials at Vauxhall (found 1870; Victoria County History 3, Kent, 1932, 76; Philpott 1991) and St. Martins Hill (Whiting and Mead 1928; Philpott 1991), richly furnished casket burials from Ramsgate Road (Victoria County History 3, Kent 1932, 76; Philpott 1991and Old Dover Road, Canterbury (Victoria County History 3, 3 Kent 1932, 77; Philpott 1991), and a phase 2a tile cist containing a ceramic primary

container, two samian dishes (Drag. 18/31 and 33), a further dish, a ring necked flagon and bag shaped beaker found in the 1960s at 3, Thannington Road (SMR No. 4820).

Both Cranmer House and St. Dunstan's Terrace sites show a marked increase in accessory vessel numbers and types as well as overall combinations of accessories especially in the second century, and a generally low number of samian vessels overall, for example. Four of the nine burials from The Telephone Repeater Station at St. Dunstan's Terrace (Whiting 1927, an earlier excavation on the same site as that detailed above) produced samian (four dishes, including one used as a lid), and some form of excavation bias towards such material might be suspected therefore. Numbers and types of accessory vessels for the latter site were quite diverse (phasing approximately 1b–2b), and no other accessories were recorded. The North Lane burial also had no other accessories, and consisted of a jar as primary container with an amphora sherd and tile fragment as lids, and a single beaker as accessory vessel (Leggatt 1991). '450 minute fragments' of cremated remains were recovered from this burial, and sex and age could not be identified.

Other accessories at Cranmer House and St. Dunstan's Terrace appear in similar numbers and types, although these seem to have been provided for a select few. Moreover, phased proportions of burials with footwear at Cranmer House are almost replicated at St Dunstan's Terrace. The placement of footwear on either side of the cremated bone deposits is also found on both sites, suggesting that local tradition extended to spatial arrangement in this case, although the overlapping of footwear seems on the basis of available evidence to be restricted to the St Dunstan's Terrace site. Perhaps most interesting are instances where very limited or apparently unique types of accessory are 'shared' between sites. We might think here of the mirror possibly used as 'lid' in both cases, but the most extraordinary recurrence is that of the respective *Dea nutrix* and Venus pipe-clay figurines. While such figurines have undoubtedly been found in burials before, it is particularly interesting that both in these cases had apparently been modified at deposition through removal of the head (in the St Dunstan's example the feet also); strangely, it would appear that yet another *Dea nutrix* figurine found at this approximate location in the nineteenth century also required conservation in order to re-attach the head at some time prior to its going on

display at the Canterbury Roman Museum (Accession number CANCM:933, *pers. observ.*; see also VCH 3, Kent, 76, and illustration from Ordnance Survey Map of Roman and Medieval Canterbury). It should of course be recognised that the head and feet of the pipe-clay figurine are the most vulnerable, yet we might still wonder if the recurrence of this particular feature represents a local, family, and/or even priestly tradition.

Overall, and despite varied excavation conditions, comparison of site profiles of Cranmer House and St. Dunstan's Terrace appears to suggest some definite local traditions; perhaps the most interesting of these are what appear to be two distinct phased groups: one supplied with only a ceramic primary container with no accessories whatever, the other with increasingly diverse combinations of accessory vessels and other accessories in the second century.

Styles of Romano-British cremation and associated deposition in south-east England

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Volume two

Volume two

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Part three: comparative case studies

Two groups of comparative case studies have been chosen for detailed analysis on the basis of location, chronology, quality of recording/specialist analyses, and size of samples (see Figure 3.00). Firstly, recently excavated sites at Abbey Field and Turner Rise in Colchester, Essex have been profiled in tandem in order to consider burials over a broad chronology (Turner Rise for first to second century burials, Abbey Field for later burials) comparable with other case studies as well as sites in the Colchester area. Secondly the various sites that comprise what is known of the eastern, central and western plots of 'The Eastern Cemetery of Roman London' have also been profiled in a comparative analysis.

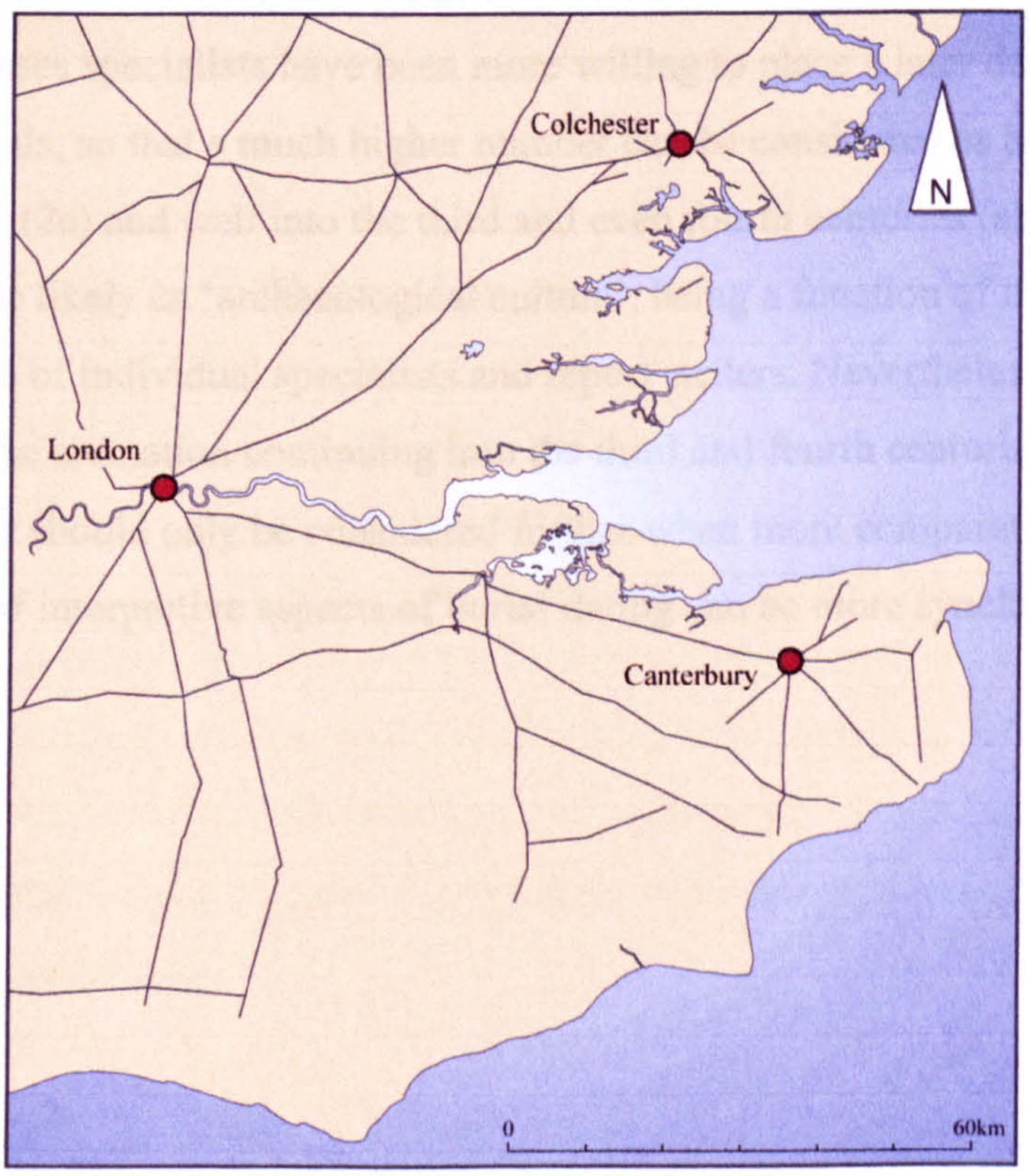

Figure 3.00: Map of south-east England, showing relative locations of urban case studies, Canterbury, Colchester and London

Once again the figures would generally appear to accord with the pattern for the chronology of the cremation rite in Roman Britain as proposed by Philpott (1991, 8).

Phase 1	Phase 2	Phase 3	Phase 4
1a = 8	2a = 23	3a = 4	4a = 7
1b = 15	2b = 27	3b = 21	4b = 1
1c = 16	2c = 61	3c = 17	
1d = 3	2d = 13		
= 42	= 124	= 42	= 8

Figure 3.10: combined phasing of burials from comparative case studies

However, while remembering that the above are a selection, it is interesting to note that in many cases specialists have been more willing to place a later date on the cremation burials, so that a much higher number can be considered as being of the late second century (2c) and well into the third and even fourth centuries (above 2c). This is perhaps more likely an 'archaeological culture', being a function of the various and changing views of individual specialists and report writers. Nevertheless, the possibility of the cremation continuing into the third and fourth centuries in areas other than Kent should only be considered further when more comparative material is available, and if interpretive aspects of burial dating can be more synchronised.

9. Colchester Case Studies: Turner Rise and Abbey Field

Introduction

The Turner Rise site comprised open area excavation as well as watching brief rescue work in 1997 ahead of development of a supermarket site on a low ridge (Turner Rise) approximately 0.75 km to the north of the perimeter of the Roman town of Colchester (*Colonia Claudia Victricensis Camulodunensium*), and on the opposite side of the river Colne from the town. This is Hull's 'Northern Cemetery', immediately to the north-west of Crummy's Areas K and M (see Figure 3.20, page 13, and P. Crummy 1993, 259–262). Crummy suggests that the apparent cemetery in this area may have been associated with a small settlement north of the river Colne (*ibid*, 261).

A road (F28) was noted on the Turner Rise site, probably single track with a possible width of 7.50m and running approximately north/south through the excavated area, with the burials all coming from the west of this (see Figure 3.21, page 14). The excavator counted 60 'graves' in all (see Figure 3.22, page 15), but many of these actually represent small quantities of cremated bone from unknown or little understood contexts; in fact, much of this site had evidently been destroyed by original terracing for a British Rail car park and trenching as part of the new development before any archaeologists were able to be present (Don Shimmin *pers. comm.)*. Many 'burials' therefore were only seen in sections of trenches already dug by the development contractors, and many comprised small amounts of material 'recovered' from spoil heaps.

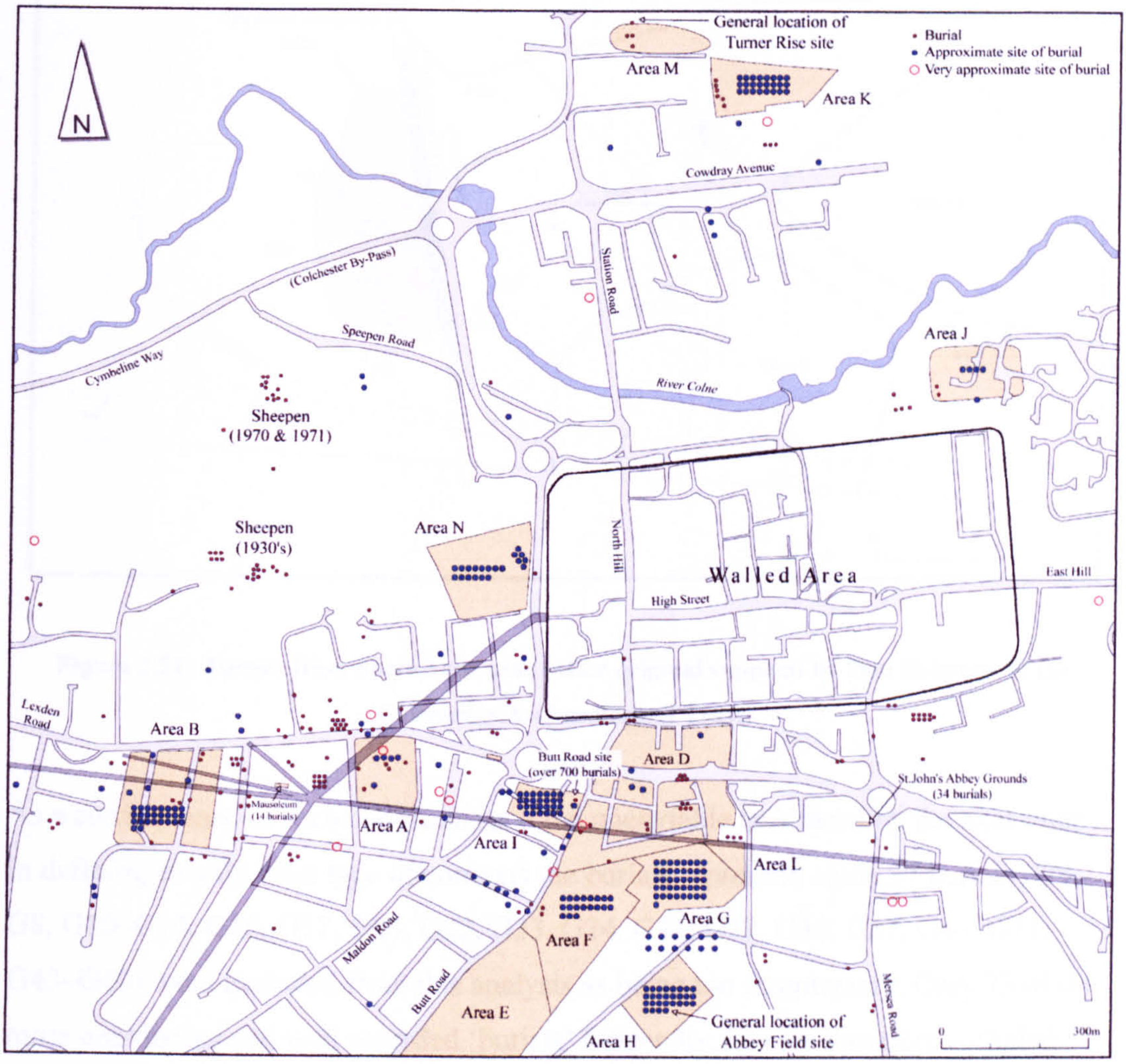

Figure 3.20: Map of Colchester, showing locations of Turner Rise and Abbey Field sites (after P. Crummy 1993, Fig. 8.2)

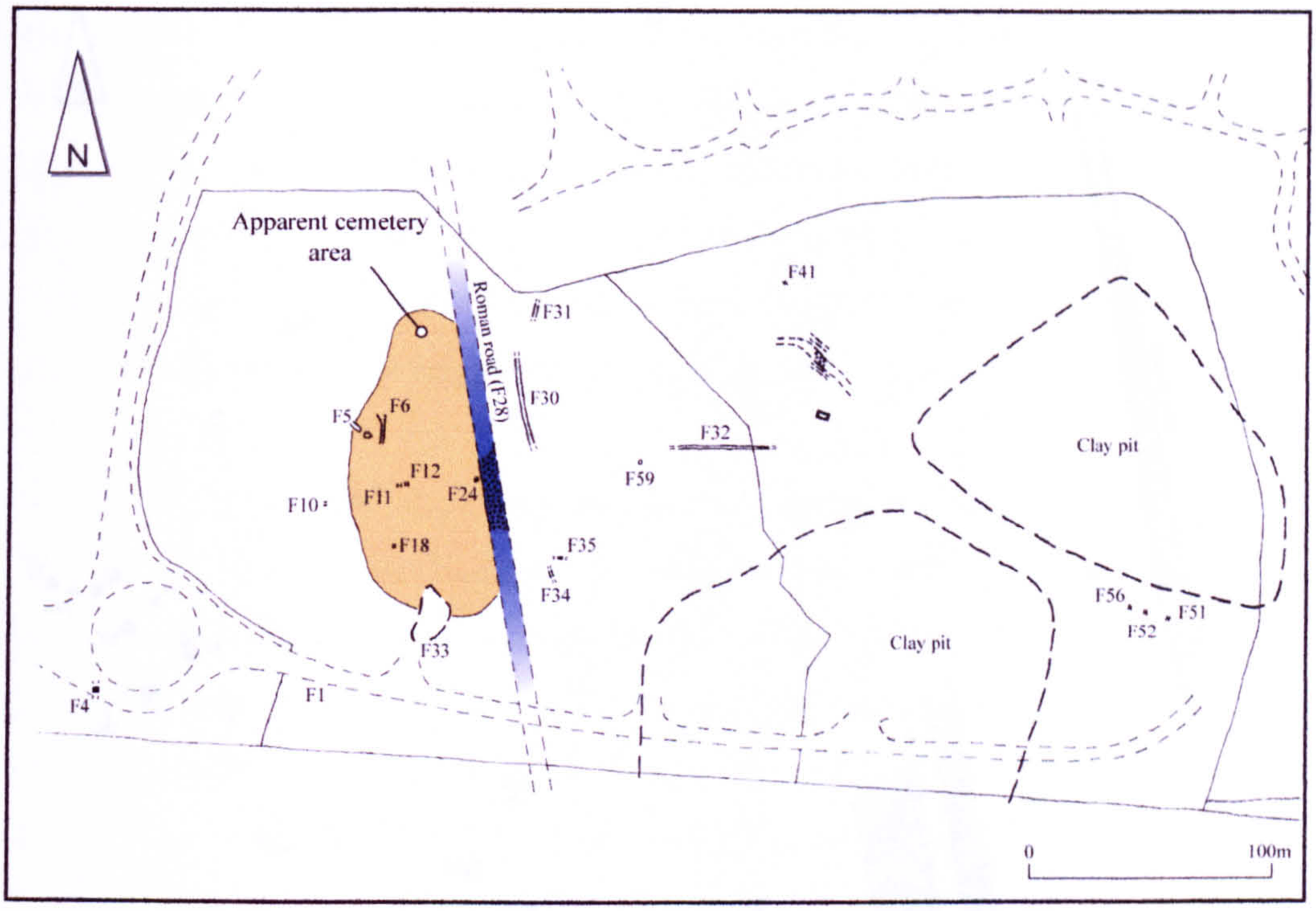

Figure 3.21: Turner Rise: overall site plan (after original supplied by Don Shimmin of the Colchester Archaeological Trust)

As a consequence of such conditions and the unenviable task faced by the excavator in defining exactly what type of contexts the burials represent, some 37 burials (G5, G8, G10–G14, G16, G17, G20, G22, G23, G24, G31, G32, G34, G37, G40, G41, G43–G60) were excluded from this analysis as being too fragmentary. Only 23 of the more convincing and well recorded 'burials' (appendix 5.1) are therefore included (mainly from the more southerly cluster excavated under more controlled conditions, see Figure 3.22, page 15). Although pitifully few, these features do at least provide a dataset of mainly first century burials to be compared with the generally later burials of the Abbey Field site, as well as the extensive gazetteer of earlier finds. At least five inhumations are also possible for the site (such features are very difficult to recognise in the acidic context of natural London Clay, where little or no bone survives).

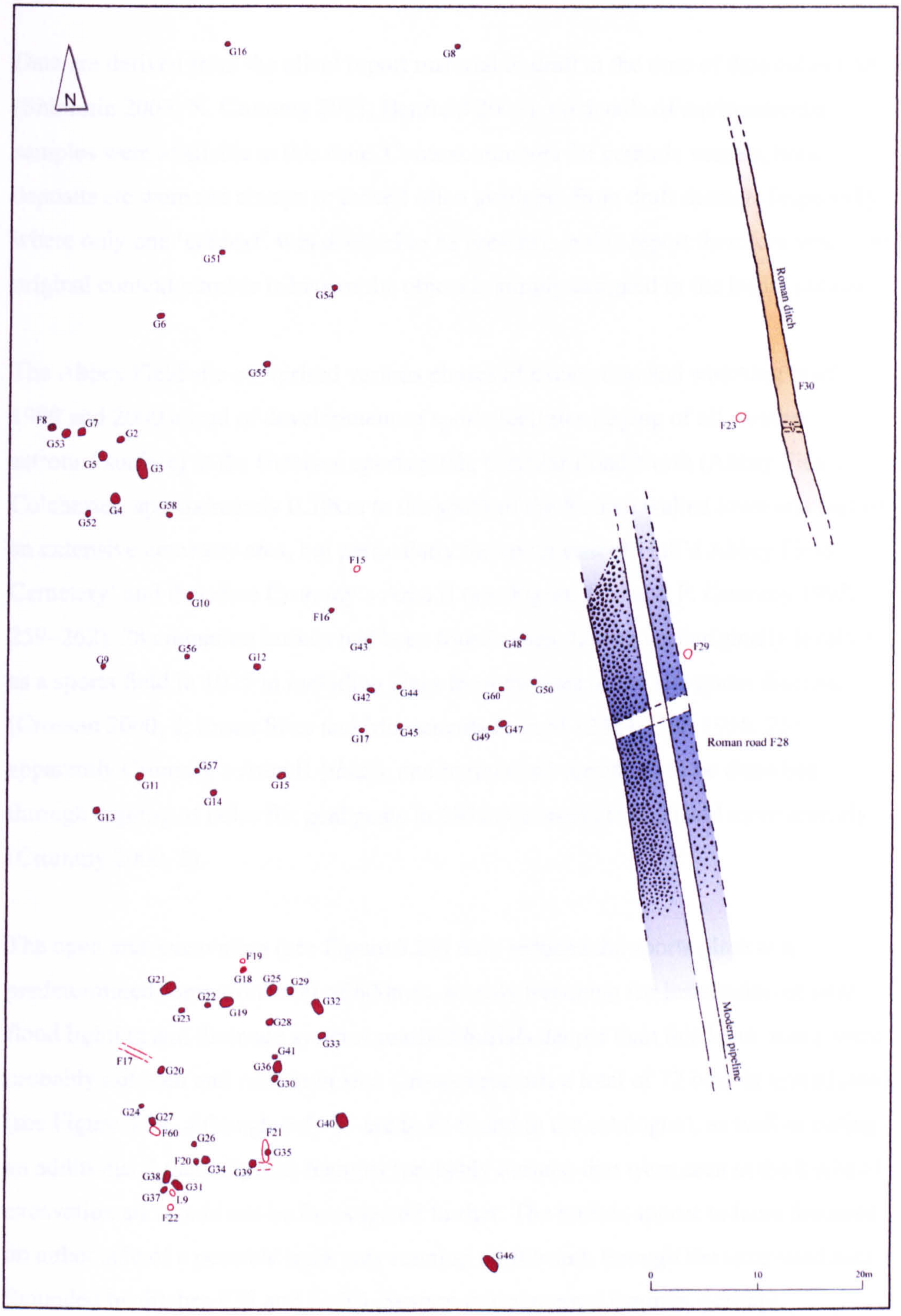

Figure 3.22: Turner Rise: apparent layout of burials (after original supplied by Don Shimmin of the Colchester Archaeological Trust)

Data are derived from the client report material in draft at the time of data collection (Shimmin 2003; N. Crummy 2003; Benfield 2003); no details of environmental samples were available at this time. Context numbers for ceramic vessels, bone deposits etc were not always or indeed often available from draft datasets (especially where only one 'context' was deemed to be present); in this report therefore where no original context number is known the object is simply assigned to the burial number.

The Abbey Field site comprised various phases of excavation and watching briefs in 1999 and 2000 ahead of development of sports facilities (laying of all weather astroturf surface) at the Garrison sports pitch, Circular Road North (Abbey Field), Colchester, approximately 0.50km to the south of the Roman walled town and part of an extensive cemetery area, but particularly the south-east of Hull's Abbey Field Cemetery' and therefore Crummy's Area H (see Figure 3.20 and P. Crummy 1993, 259–262). 28 cremation burials had been found when the site was originally levelled as a sports field in 1925 in including eight from the area of the site under discussion (Crossan 2000, 2; Essex Sites and Monuments Record 12384; Hull 1958, 255; apparently Crummy's Area H [*ibid*]), and burials had continued to be disturbed through digging of holes for goal posts in 1931 (Crossan 2000, 2) and more recently (Crummy 2000, 2).

The open area excavation (see Figure 3.23) only reduced the sports pitch to a predetermined formation level of 600mm, so only trenching for installation of new flood lighting and drainage systems reached burials deeper than this level; many were probably not seen and remain *in situ*. Crossan records a total of 72 burials investigated (see Figure 3.24, although only 71 are to be found in the catalogue), as well as noting an additional 7 (actually six) features (probably burials) that were seen at the limits of excavation and could not be investigated further. The burials appear to have focussed on either side of a possible track way running north/south through the excavated area (bounded by ditches F58 and F120). Several other internal features, perhaps delineating enclosures or plots, were also noted, as well as a single possible pyre site (F37).

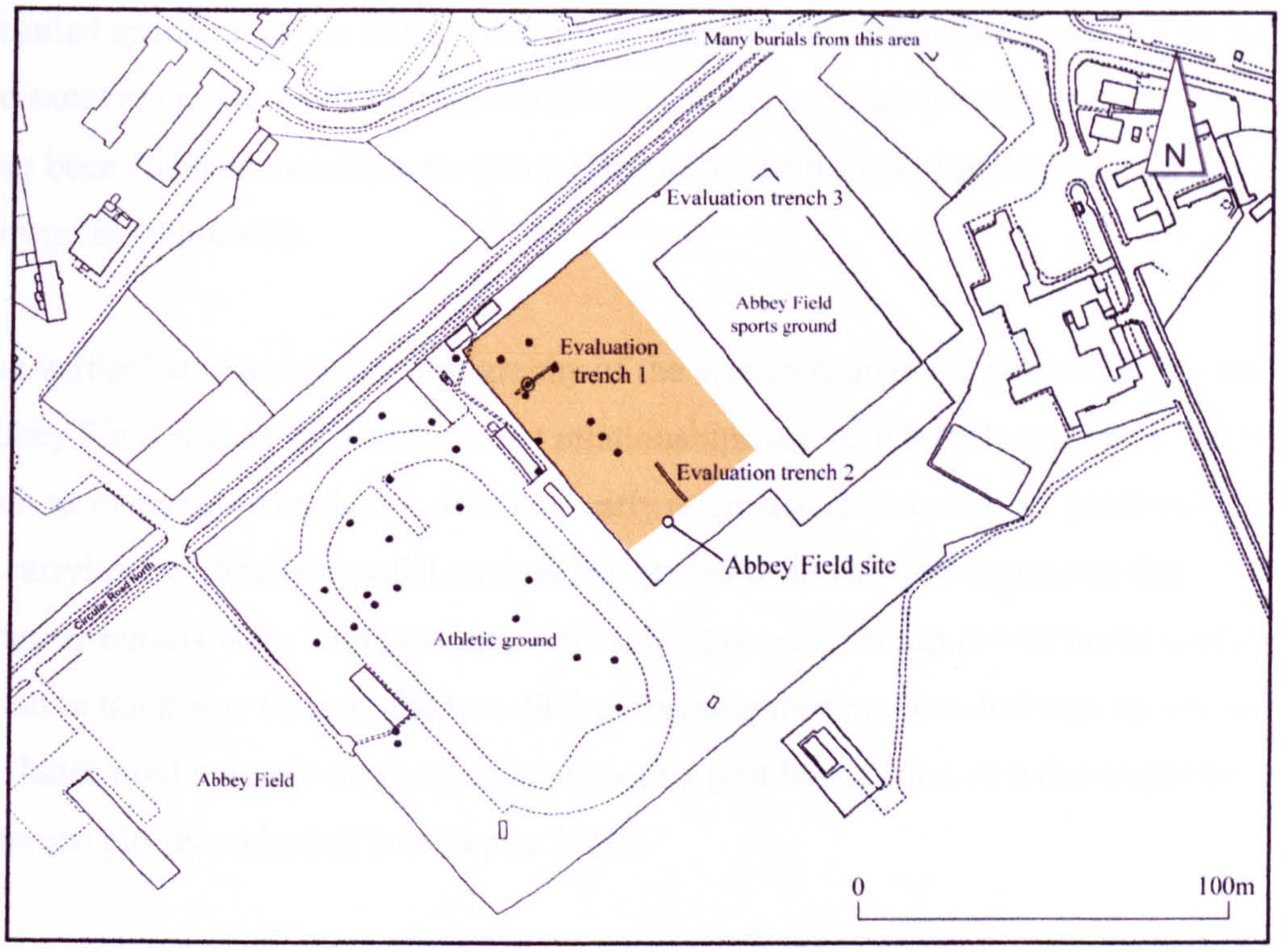

Figure 3.23: Abbey Field: more detailed location map (after Crossan 2000, Fig. 2)

Only 55 Abbey Field burials were deemed to be sufficiently undamaged or understood and datable to be included in this analysis (appendix 5.1), and the other 23 (including those unexcavated) listed in the catalogue (F29, F34, F38, F40, F42, F43, F74, F78, F91, F92, F94, F97, F99, F100, F101, F102, F104, F109, F116, F171, F199, F201 and F202) are excluded. Data are derived mainly from the draft client report and appendices (Crossan 2000; Benfield 2000; Black 2000; N. Crummy 2000; Fryer 2000; Wade 2000a; 2000b), with further detail obtained from the site archive.

Overall then, a combined total of 78 burials from the Turner Rise and Abbey Field sites are analysed in detail here. However, a further fifteen burials (burials G7, G29, G38 at Turner Rise and burials F30, F41, F44, F84, F85, F90, F93, F140, F157, F160, F205 and F207 at Abbey Field) were considered more likely to be deposits of mixed bone and pyre material (whether alternative deposits of pyre material or 'Brandschuttgräber') or otherwise undefined (appendix 5.0), and are here generally treated separately, leaving a combined total of 63 more certain cremation burials.

Detailed spatial analysis of the Turner Rise burials is not advisable given the nature of the excavation. However, burials within the southern cluster (see Figure 3.22) have here been checked as a separate group (Group A= 14 burials) from the rest on this site (Group B= 9 burials).

The vertical and horizontal stratigraphy of the also truncated and partially excavated Abbey Field site, as well as the exact relationships between burials and other features such as its possible trackway, are not clearly understood; there is little point therefore in carrying out detailed spatial analyses at site level for this site beyond noting whether burials were west (Group C= 9 burials) or east (Group D= 43 burials) of the putative track way (indeed the two ditches forming the apparent drainage system of the latter might simply mark adjacent cemetery plot boundaries, or a thoroughfare between plot boundaries) (see Figure 3.24).

Comparative chronology of the two sites (appendix 5.1) is made simpler by the fact that the same pot specialist was involved in both cases (Benfield 2000; 2003). Of the 63 more definite cremation burials in the sample, the Turner Rise site accounts for all of the probably first and early second century burials, with only 5 of 20 burials being dated to the late second century or early third. Abbey Field burials in this sample are not earlier than the mid- to late second century (2b) and appear more likely to peak in the third, while cremation and associated deposition continue late into that century and perhaps peak again in the late third century (2c, although it may well be that a large proportion of the high concentration of burials assigned to this phase are there because they included no accessories, and only ceramic primary containers with a broad date range) and early fourth (3b, 3c, 4b).

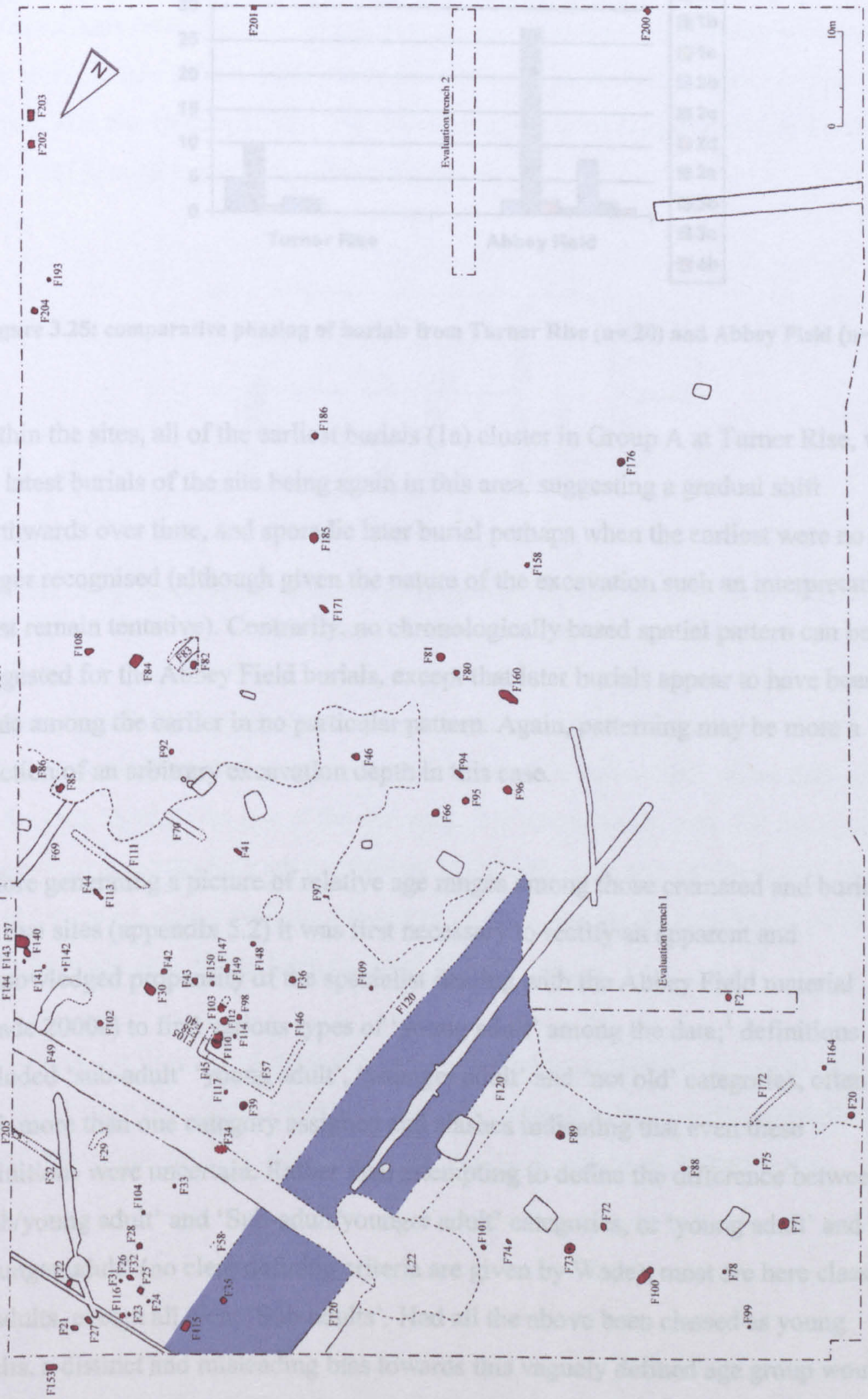

Figure 3.24: Abbey Field: site plan (after Crossan 2000, Fig. 3)

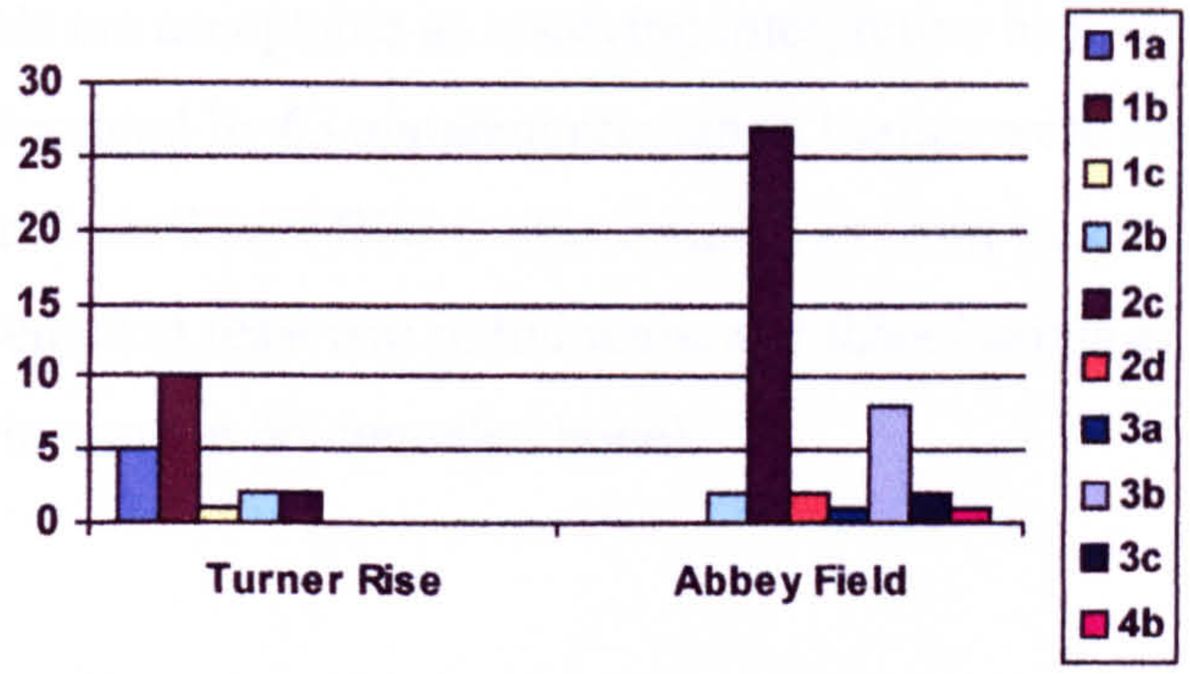

Figure 3.25: comparative phasing of burials from Turner Rise (n= 20) and Abbey Field (n= 43)

Within the sites, all of the earliest burials (1a) cluster in Group A at Turner Rise, with the latest burials of the site being again in this area, suggesting a gradual shift northwards over time, and sporadic later burial perhaps when the earliest were no longer recognised (although given the nature of the excavation such an interpretation must remain tentative). Contrarily, no chronologically based spatial pattern can be suggested for the Abbey Field burials, except that later burials appear to have been made among the earlier in no particular pattern. Again, patterning may be more a function of an arbitrary excavation depth in this case.

Before generating a picture of relative age ranges among those cremated and buried at the two sites (appendix 5.2) it was first necessary to rectify an apparent and acknowledged propensity of the specialist dealing with the Abbey Field material (Wade 2000a) to find various types of 'young adult' among the data;[1] definitions included 'sub-adult' 'young adult', 'younger adult' and 'not old' categories, often with more than one category assigned and slashes indicating that even these definitions were uncertain. Rather than attempting to define the difference between 'Sub/young adult' and 'Sub-adult/younger adult' categories, or 'young adult' and 'younger adult' (no clear defining criteria are given by Wade), most are here classed as adults, except all clear 'Sub-adults'. Had all the above been classed as young adults, a distinct and misleading bias towards this vaguely defined age group would have seemed apparent (68% of the sample!).

[1] This is acknowledged by Wade (2000a, 19).

If the above controls are acceptable as resolving interpretive bias, the majority of the 61 individuals represented by 63 apparent cremation burials were probably adult, if one 'possible adult' from Tuner Rise is also counted as adult as a control (burial G1 at Turner Rise represented at least two individuals, and three burials at Abbey Field [80; 186; 203] seemed to contain no cremated bone).

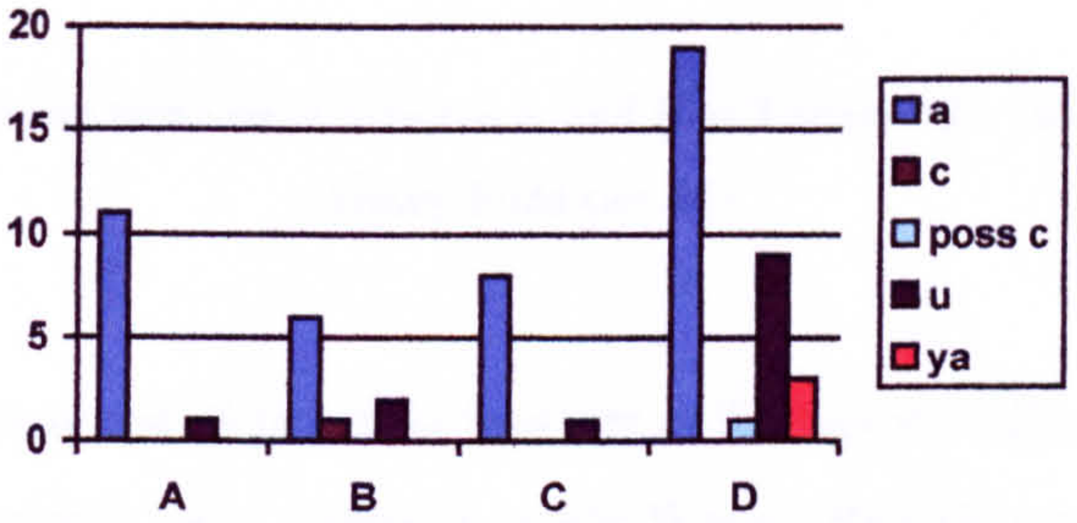

Figure 3.26: age ranges suggested by human remains in Groups A and B at Turner Rise (n = 21) and C and D at Abbey Field (n= 40)

The fact that all the 'young adults' appear to cluster in Group D at Abbey Field probably results from that group having many more burials overall, rather than any spatial bias based on the age of the deceased. It is interesting to note that the remains of the child at Turner Rise were contained in the only apparent 'double burial' (burial G1 in Group B), mixed with the remains of an adult. Remains of another possible child were found at Abbey Field in burial 27 in Group C. [2]

The ubiquitous problem of assigning sex categories to cremated remains (as well as variant interpretive criteria between specialists) is perhaps particularly demonstrated by the data from these two sites, the vast majority (55) being of unknown sex.

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[2] N. Crummy argues that the small diameter of the armlets placed in burial 25 at Abbey Field 'shows that the burial was that of a small child' (N. Crummy 2000, 21), but this presumption is not informed by the bone data where no age is specified for the 10g of bone present (Wade 2000a, 18) and should be offered as but one interpretation.

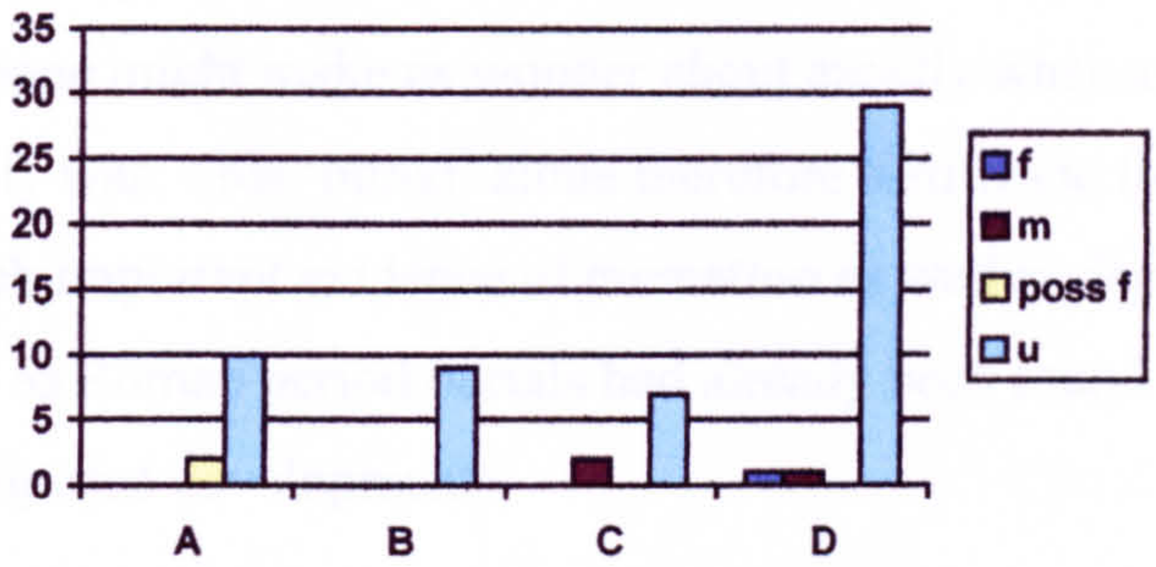

Figure 3.27: sex of human remains in Groups A and B at Turner Rise (n= 21) and C and D at Abbey Field (n= 40)

Only two burials were sexed as possible females at Turner Rise (burials G30 and G39 in Group A; Don Shimmin *pers. comm.*), while Wade (2000a) is more certain of 3 males (burials 73 and 164 in Group C, 39 in Group D) and a female (burial 81, Group D) at Abbey Field.

Cremation

Other significant feature types perhaps related to cremation do appear to have been present at Turner Rise, including a possible pyre site (apparently merely observed, as no details were available in the inventory), and 'burial' G13, from an utterly destroyed context, and not included in detailed analysis here.

The latter is perhaps either a 'pyre debris deposit' or a 'Brandschuttgräb' of some variety by virtue of its mixed contents, including a large quantity of animal bone (of the 1kg of burnt bone, only 17g is human, the rest is sheep or goat, plus one unburnt tooth fragment, probably bovine),[3] burnt bone discs, a copper alloy slide key, burnt and unburnt glass, samian dish sherds as well as sherds in a more local coarse reduced ware (some apparently 'deliberately broken', although the diagnostic features used to determine such action are not set out) and buff flagons, 20 iron nail fragments, and concretions of burnt copper alloy and bone. N. Crummy suggests that some form of ornate box or casket was burnt on the pyre in this case (N. Crummy 2003), although a

[3] In fact, might this not qualify under the general category of 'Aschengruben' (Wigg 1993; see also Pearce 1999, 45)?

bier is another possibility, and moreover the very small amount of human bone in relation to animal bone might make us wonder about exactly what sort of feature 'Grave G13' actually was. This 'burial' alone therefore testifies to the unfortunate annihilation of much important evidence of cremation as well as deposition rituals on this site (especially as Roman period burials had already been found in close proximity to the proposed development).

Crossan reports a possible pyre site (or hearth) at Abbey Field at the eastern edge of the site (F37). This comprised a small area of burnt soil exposed next to the section (although perhaps tellingly no cremated bone is associated with the feature); an adjacent pit ('burial' F140, see below) contained 'scattered contents of burnt pottery, nails and cremated bone' (Crossan 2000, 10), and might represent 'pyre sweepings'. No further details were available.

Other possible pyre related features or 'Brandschuttgräber' from Turner Rise are 'Graves' G7 (Group B), G29 and G38 (Group A); in each case a relatively small amount of cremated bone (this may reflect poor recovery conditions in at least some cases) was loose (or bagged?), mixed with potsherds and nails in a charcoal rich fill (G7 [11g]; G29 [321g, 'throughout the fill']; G38 [17g]).

Indeed, it is very interesting to note Shimmin's observations in the introduction to his draft report that '(I)n many instances fragments of cremated bone were found scattered in the pitfall, even when most of the bone was housed in a vessel', and that pit fills 'often contained large quantities of charcoal' (Shimmin 2003, 3). In several cases bone within and without ceramic primary containers is clearly recorded for the same burial (see below). Is there perhaps the suggestion of a tradition of 'Brandgrubengräber' and/or 'Brandschüttungsgräber' at Turner Rise? Without further detail any attempt at such definition must remain tentative (we should also remember the degree of disturbance suffered by this site).

The approximate description of 'undefined burials' (appendix 5.0) at Turner Rise also fits with twelve features recorded as burials at Abbey Field, these being loose or bagged, containing small amounts of bone and frequently mixed with potsherds and nails in generally carbon rich deposits; noting other details, these 'undefined' burials

include F30 (137g of bone, also some vitrified clay), F41 (unknown bone weight), F44 (128g in jar base, also nails and 9 hobnails, apparently cut into slot F113 although the relationship with this feature is unclear, with charcoal rich fill), F84 (5g of bone; also 'large number of iron nails and hobnails'), F85 (19g of bone), F90 (unknown bone weight, only large burnt mammal femur fragment mentioned, also includes crushed pot base, 22 nails and at least 87 hobnails, no carbon reported), F93 (bone not in table, could be burnt animal bone?), F140 (41g of bone, also nails and burnt potsherds), F157 (38g of bone, also burnt stones), F160 (2g of bone, no carbon recorded), F205 (142g of bone, also unburnt animal bone) and F207 (72g of bone, also unburnt animal bone).

These as yet 'undefined' burials or features then seem to have been made sporadically during most of the phases represented by both sites (bearing in mind that there are many more burials recorded at Abbey Field).

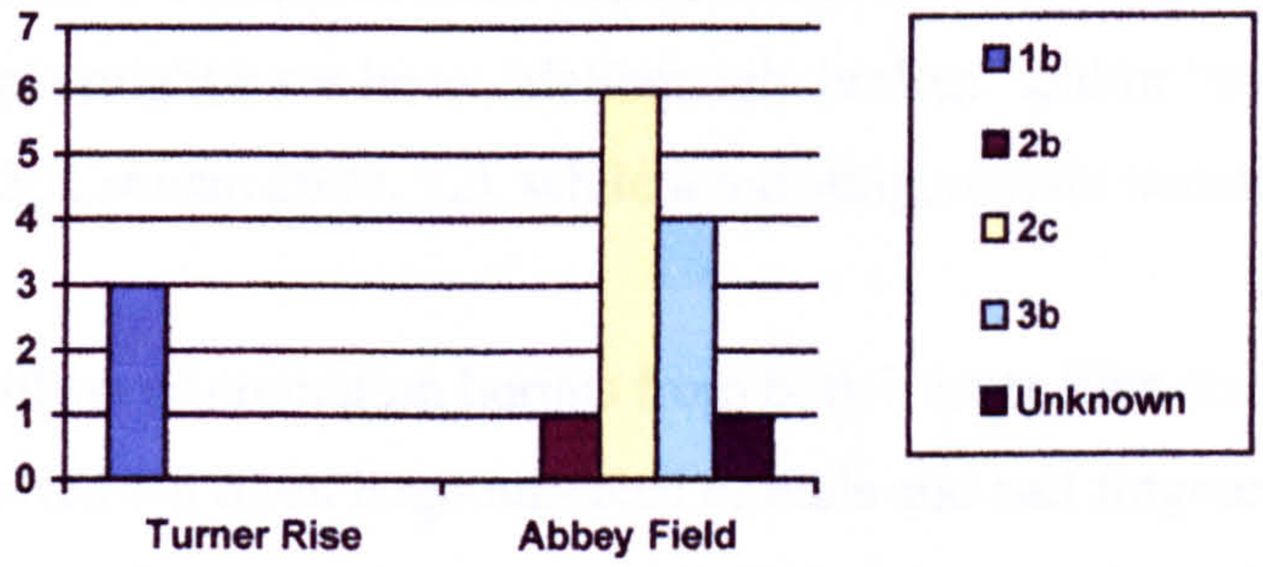

Figure 3.28: phasing of 'undefined burials' at Turner Rise and Abbey Field

Little more can be said of the features until more detailed information on morphology and structure of deposits is made available, and a systematic comparative analysis carried out (see Chapter 11).

However, it is clear that the pyre material components of these features can give tantalising if limited information about at least some of the cremation methods, pyre goods etc. The extraordinary range of materials in the destroyed and perhaps aptly named feature 'Grave 13' at Turner Rise for example appears to indicate a wide variety of pyre goods and other materials (samian, coarse wares, flagons, boxes, glass,

copper alloy objects, large amount of animal bone etc) and vigorous fragmentation and/or burning on the pyre or elsewhere (see above).

Burnt sherds from feature F140 (adjacent to an area of burning) at Abbey Field might be indicative of pyre side ritual, and it is particularly noteworthy that the only 3 'burials' on the Abbey Field site (or either site for that matter) to include hobnails as evidence of footwear ('burials' F44, F84 and F90) are all counted among the undefined burials or pyre related group, suggesting a link between footwear and the pyre through association with probable pyre material, as opposed to placement of intact footwear in burials at the deposition stage (see Chapter 11; F90, with no carbon reported, and as many as 84 hobnails is ambiguous, but only burnt animal bone is reported for this 'grave').

No explicit details of diagnostic features are given by either specialists or excavators in relation to evidence of pyre maintenance or other pre-depositional modification of objects derived from undefined or more secure burial contexts, so claims that certain pottery for example might have been "deliberately broken" and/or "scattered" (Shimmin 2003, 3; Crossan 2000, 12), while interesting, remain tentative.

Considerable numbers of cremation burials from both Turner Rise and Abbey Field sites contained varied but often large numbers of nails and nail fragments mixed with the cremated bone (and apparently not resulting from boxes or shuttering as secondary containers, there being no discernable pattern of nails etc *in situ* in these cases). This may result from re-use of wood as pyre fuel.

At Turner Rise, nails and tacks 'usually incomplete, were common, perhaps derived largely from items burnt on the pyre' (Shimmin 2003, 3). At Abbey Field Crossan reports that 'a total of forty-five graves (including seven where the only nails present were within the jar) contained nails in sufficient number to represent one or more collapsed boxes if all were from grave furnishings rather than wood burnt on the cremation pyre' (Crossan 2000, 12; for a definition of 'sufficient' numbers of nails, see N. Crummy 2000, 24). In both cases it would seem equally possible that the nails and nail fragments represent some sort of pyre material, be it fuel or pyre goods of some sort, perhaps suggesting a wholesale collection method (see below). There being

no diagnostic evidence of whether such objects were burnt or not, an alternative interpretation for some nails (especially those within ceramic primary containers?) is that they derive from biodegradable wooden covers or 'lids' for burials.

No details of possible environmental analysis of cremation deposits at Turner Rise seem to be in existence/available. At Abbey Field on the other hand 31 of the 84 samples originally taken have been analysed (these selected by the excavator as of special interest, see below), from 'the grave fills and samples from the fills of pots' (Fryer 2000, 33). These included deposits within the 'backfill' of burials F20, F22, F23, F24, F25, F26, F27, F31, F44, F153, F193, and F204, as well as soil samples from primary containers in burials F75, F81, F158, 200 and 204 (the latter being a loose/bagged or scattered deposit within a probable box as secondary container, and therefore less certainly a separate context).

The exact criteria for selection of such deposits are not made clear in the report, but it is interesting to note that many of the backfill deposits sampled and analysed are derived from an apparent cluster of loose/bagged burials nearer the northern end of the excavation (F20, F22, F23, F24, F25, F26, F27, F31), while F44 is one of the 'undefined' burials discussed earlier. Burial F153 seems to have been observed to contain charcoal within the primary container (Crossan 2000, 8), but it is unclear from the catalogue why burial F193 was selected for such sampling (*ibid*). Burial F204 seems to have been selected on the basis of its being possibly contained within a box or planks as a secondary container.

The backfill deposits (bearing in mind these were from an intuitively selected minority sample of burials and contexts) are potentially revealing in terms of the level of pyre derivatives present in burials on the Abbey Field site. Charred cereal grains were very rare, but nonetheless present in a number of backfill samples (a single barley grain in burial F20, low numbers of indeterminate cereal in burials F153 and 193). Common grassland weed species were present in higher numbers (particularly in burials F20, F23, F24, F153 and F204), and practically all samples contained notable amounts of charcoal with several containing between 10 and 100 specimens (burials F22, F23, F24, F26, F31 and F204) and some over 100 specimens (burials F20, F25, F44 and F153).

Further pyre material seems to have been deposited in the backfills of most of the burials sampled in this way in the shape of considerable if varied amounts of 'Black porous 'cokey' material' and/or 'black tarry material' (F20, F22, F23, F24, F25, F26, F27, F44, F193, and F204), while small 'coal' fragments and/or vitrified material were less numerous but nonetheless again a frequent component (F20, F22, F23, F24, F25, F44, F153 and F193). As might be expected from the loose/bagged burials, burnt bone (human?) was recovered from no less than nine of the fifteen burial backfill samples in the report table (F20, F22, F24, F26, F27, F31, F44, F153 [this apparently in a ceramic primary container] and F157).[4]

The selection of primary container deposits for environmental analysis seems mainly to have been based on apparently undisturbed deposits within ceramic primary containers F75, F81, F158, F200); the primary container deposits from box burial F204 were presumably derived from material adhering to beaker potsherds rather than bone scattered elsewhere in the fill.

Samples from primary container deposits also seem to indicate the presence of notable amounts of other pyre material mixed with cremated bone. Samples from ceramic primary containers in burials F75, F81, F158 and F200 were all found to contain notable amounts of charred cereal, charcoal, 'black porous cokey material', 'black tarry material', 'small coal fragments' and vitrified material which appear to broadly correlate with the profile of possible pyre derivatives from the burial backfill samples.

Unfortunately, only burial F204 seems to have been sampled both in terms of backfill and in terms of primary container. Both types of sample in this case appear to have contained the familiar pyre material components to varying degree, with the material being mixed with the cremated bone deposit.

The sheer amount of probable pyre material both in backfills and primary containers is of interest in terms of pyre method (types of fuel [grass or cereal kindling, coal and wood?], temperatures [what sort of vitrified material?], pyre maintenance [degrees of

[4] F157 is not otherwise included in this analysis

fragmentation] etc); post-pyre collection methods (whether cremated bone was indeed separated from pyre material in every case); deposition (do the environmental results indicate a greater trend towards forms of 'Brandschuttgräber' at Abbey Field, especially in the cluster of loose/bagged burials at the northern end of the site?). Fryer recommends no further work on remaining untested samples from 'pot fills' (2000, 34), but this would seem to be the only way of obtaining a) an understanding of the extent of mixing of cremated bone with pyre material across the site, and b) further detail of relative profiles of pyre material components of burial backfills and the contents of primary containers.

At both Turner Rise and Abbey Field there would appear to be evidence of considerable amounts of pyre material being part of the depositional phase of the ritual sequence. Specialists in each case seem not to realise the possible significance of this for the local profile of the rite, and only detailed comparison of the relative amounts and nature of the material with more distant sites (on a regional basis) may indicate something more like the 'Brandschuttgräb' being a feature of Colchester cremation burials in particular. The cluster of loose/bagged burials at the northern end of the Abbey Field site can certainly be considered possible 'Brandschuttgräber'.

Only one burial in the sample was found to contain the remains of more than one individual, suggesting that cremations were in the main carried out on individually constructed pyres and/or extremely well cleared reusable pyre facilities (bearing in mind the limitations of the evidence in relation to the chance presence of diagnostic features). It may be especially significant that the only exception in the sample (burial G1 at Turner Rise) is one that included the remains of an adult (of unknown sex) and a child (one of only two evidenced examples of children's remains in the whole sample, the third might be inferred other accessories in the burial),[5] perhaps suggesting alternative controls on the use of cremation for children, or indeed only cremation of children in special cases (although, as has already been noted, assumptions of familial relationship etc can be easily challenged).

[5] N. Crummy 2000, 21

As has been stated, specialists are not specific in the reports about the relative degrees of fragmentation, burning etc of possible pyre goods. The majority of possibly pyre related objects at both sites seem to have been nails or nail fragments (especially the latter, suggesting pyre destruction). A damaged copper alloy stud with mineralised leather adhering to 'the underside' retrieved from the primary container of burial G2 at Turner Rise may or may not have been burnt, but again provides evidence of some sort of destruction (although might this also derive from a biodegradable cover or 'lid'?). Animal derivatives (burnt) mixed with cremated human bone are also present in some burials, and in intact or mostly undisturbed burials both at Turner Rise (burial G4) and at Abbey Field (burials F24, F27, F28, F73, F81 and F176) all such materials are also clearly highly fragmentary. Cremation and/or collection methods would therefore seem to have been very destructive of pyre goods and possibly animal offerings (although it should be remembered that the latter might be more easily modified for reasons other than the pyre such as food preparation).

The incidence of burnt animal remains representing pyre goods or offerings would appear to be relatively low from both sites, although this is much more likely a function of the circumstances of chance collection of such material along with cremated human bone rather than an indication of specialised treatment of certain pyres. It should also be noted that animal remains at Abbey Field were mainly found in burials known from environmental sampling to incorporate pyre material either in backfill or primary container (burials F24, F27, F28, F73 and F81).

At Turner Rise, cremation deposits from burial G1, G4 and G42 contained cow or horse bone (four rib fragments), pig or cow (second phalange fragment) and a possibly residual fragment of unknown taxonomy respectively. Similarly cremated bone deposits from burials F73 and F176 at Abbey Field contained small amounts of bone of unknown animal types (fragment of a humerus in F73), while deposits from burials F22 and F33 contained probable pig remains (radius fragments) and those from burials F24 and F204 contained possible bird bones. Apparently unburnt small mammal or possibly bird bone were recovered from deposits in burials F27 and F28, although these (along with other unburnt bones from burial backfills) might well be residual. While such sporadic finds provide only a glimpse of overall pyre practice, it is interesting to note the apparent variety of animal type from such a small sample.

There is little evidence of other pyre goods from either Turner Rise or Abbey Field in the cremation burial deposits. The only possibility of such an item from a secure cremation burial context at Turner Rise is the damaged copper alloy stud in burial G2, while at Abbey Field only ferrous globules in the apparently pyre related backfill of burial F22, and 'metallic' globules from within the primary container of burial F158 seem to testify to metallic pyre goods destroyed by the heat of the pyre (although there might be more such material in samples as yet not analysed). However, hobnails, broken pottery and melted copper alloy from 'undefined' contexts seemingly containing pyre material (see above) suggest that such objects were indeed placed on the pyre in at least some cases.

As might be expected, the degrees of truncation and damage of contexts at both Turner Rise and Abbey Field make an overall consideration of relative bone weights (appendix 5.2) as evidence of collection methods somewhat limited. Nonetheless, it is interesting to note the diversity of bone weights even from the few intact contexts.

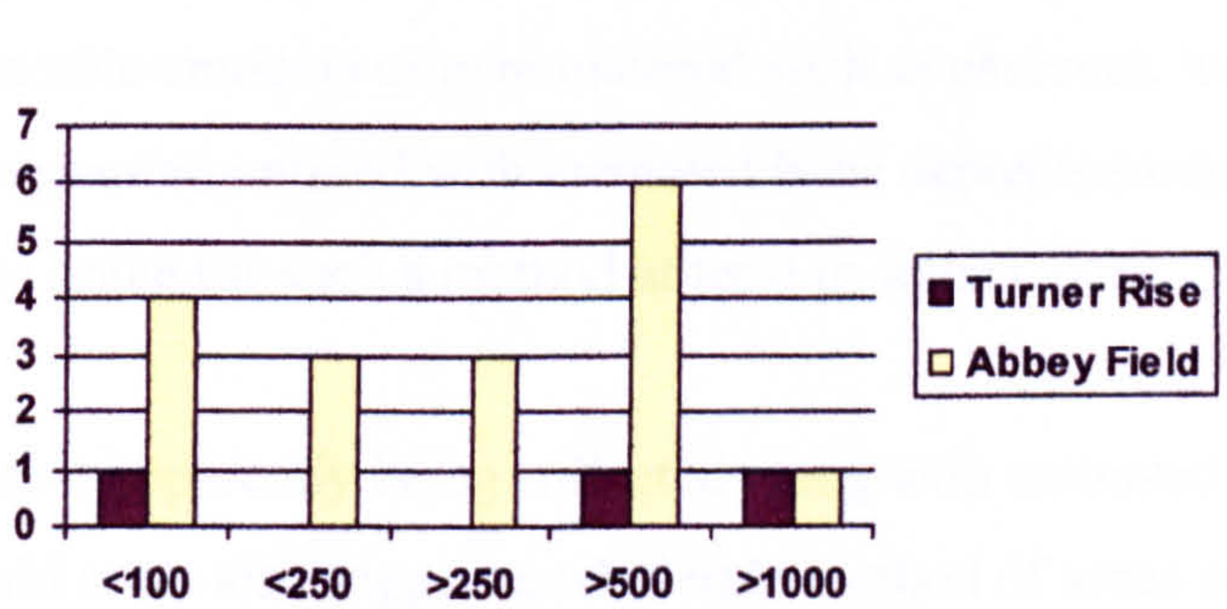

Figure 3.29: diversity of bone weights (in grams.) from intact contexts at Turner Rise and Abbey Field

The three intact deposits from Turner Rise (burials G28 [19g], G39 [940g] and G2 [1359g]), all being from ceramic primary containers are notably diverse in this respect. However, although the 17 intact deposits from Abbey Field also seem to cover a wide spectrum of collection/deposition, it should be noted that the lesser amounts certainly seem to correlate with the relative degree of protection afforded by different types of primary container. Only one deposit over 250g (burial F21 [299g])

was loose or bagged at deposition, and all the rest of the loose, bagged, or apparently scattered deposits perhaps not surprisingly contained less than 250g.

In the same way, only one of the Abbey Field deposits within ceramic containers held less than 250g of bone (burial F96 [249g at that], with one (burial F200) containing 478g of bone, and the majority containing over 500g (burials F36 [728g], F39 [636g], F72 [517g], F81 [580g], F153 [626g] and F158 [571g]) as well as an exceptional case with just over 1000g (burial F73 [1055g]). Even so, we might note the possible clustering at around or a little over 500g, as well as some variability here among so few deposits; these would seem to be 'token' amounts in every case, perhaps around a quarter to a third of the total weight of cremated bone we might expect from a complete adult cremation. No details of skeletal elements were available from either site.

The fact that one burial was found to contain the remains of more than one individual (burial G1 at Turner Rise) might suggest some form of wholesale collection method, not differentiating between the remains of two individuals in this case at least. The apparently considerable amounts of pyre material such as charcoal, 'cokey' and vitrified material apparently mixed with cremated bone deposits sampled from Abbey Field seems also to argue for such a method at least in some cases.

Some animal remains apparently being collected along with cremated human remains from the pyre would seem also suggest a wholesale method of some sort, particularly in relation to further evidence of the amount of pyre material apparently mixed with cremated bone in a number of the Abbey Field burials. The comparatively small amount of animal bone might be an indicator that bone was recovered from a cooled section of the pyre, probably from areas perceived to contain the most bone (and perhaps where there was less likely to be animal bone if such offerings were placed elsewhere on the pyre).

Plant remains, again because the specimens from Abbey Field were recovered from samples apparently containing considerable amounts of other pyre materials, seem to provide further evidence of a wholesale collection method at least for the

environmentally sampled Abbey Field contexts. These components also suggest a lack of sorting of the material.

Other remains, including 'pyre goods', might offer some further insights or conflicting evidence. On the one hand we might note the low numbers of metal pyre goods recovered from cremation deposits at either site (although it should be remembered that Turner Rise environmental samples are not available). This might suggest either a general lack of such objects being burnt on the pyre (although the hobnails and other metal objects from a number of contexts apparently containing pyre material would tend to argue against this, see above), or that some sort of gravitational or alternative sorting of wholesale deposits was carried out that filtered out heavier material.

On the other hand the large numbers of nails (possibly derived from the pyre in at least some cases) from both sites, as well as pyre material from the Abbey Field samples seem to suggest little sorting of the material. This interpretive difficulty is impossible to resolve without further data being available, although most of the Abbey Field examples seem to be grouped and perhaps therefore reflect a specialised rite (burials F20, F22, F23, F24, F25, F26, F27 and F31 at the northern end of the site).

Deposition

Cremated bone deposits

An unknown number of burials at either site appear to have incorporated pyre material as well as cremated bone. This is especially the case with as yet undefined burials at both sites (burials G7, G29, G38 at Turner Rise and burials F30, F41, F44 [9], F84, F85, F90, F93, F140, F157, F160, F205 and F207 at Abbey Field). Nonetheless, there is evidence here of a far more widespread deposition of both cremated bone and pyre material, perhaps mixed in some cases (e.g. Abbey Field: F75, F81, F158, F200), in other cases perhaps the incorporation of pyre material purely within burial backfills (Abbey Field: burials F20, F22, F23, F24, F25, F26, F27, F31, F153, F193, and F204). The fact that large numbers of nails and frequent

carbon were observed in features at Turner Rise, and that the Abbey Field examples only represent the more detailed evidence of selected samples suggests that the practice may have been more widespread at both sites.

Without further evidence of pyre derivative components within and without primary containers, it is impossible to be more accurate about numbers of possible 'Brandschuttgräber' at either Turner Rise or Abbey Field, or whether these in fact constitute 'Brandschüttungsgräber' or 'Brandgrubengräber'. However, a possible localised over-representation of such burial 'types' might be suggested as a premise for future recording and research. The northern cluster of Abbey Field burials (F20, F22, F23, F24, F25, F26, F27, F31) are perhaps the most compelling candidates for being specialised 'Brandgrubengräber' of some variety, while the significant number of other burials where bone seems to have been scattered both in and out of primary containers suggest another possible group (see below).

Disturbance of both sites should be taken into account (as well as especially difficult data recovery conditions at Turner Rise), but where location of the cremated bone in the pit could be determined with any degree of certainty (position unknown in 24 burials) the vast majority of deposits (33 burials) seem to have been centrally placed, with only four burials (G28 at Turner Rise [NE], and F25 [S], F32 [NW] and F82 [S] at Abbey Field) being possible exceptions.

There would seem to be more significance in the complex spatial relationships of cremated bone and primary containers in a significant minority of cases at both sites (Turner Rise: G25, G27, G33, G36, G42; Abbey Field: F32, F35, F66, F115, F204), where cremated bone may have been 'scattered' in the pit, both within and outside ceramic primary containers. While such an interpretation must be tempered by bearing in mind the degrees of overall disturbance of both sites, the evidence for these particular burials appears to be sound, and not related to post-depositional disturbance.

Pit design

The overall levels of truncation, as well as difficult excavation conditions in the case of Turner Rise especially render a comparative analysis of pit design untenable.

Primary containers

An overall view of primary container selection (appendix 5.2; 5.4) at the two sites reveals a predominance of ceramic vessels (78%), and especially jar or probable jar forms (56%; some of these, particularly at Turner Rise, might have been bowls).

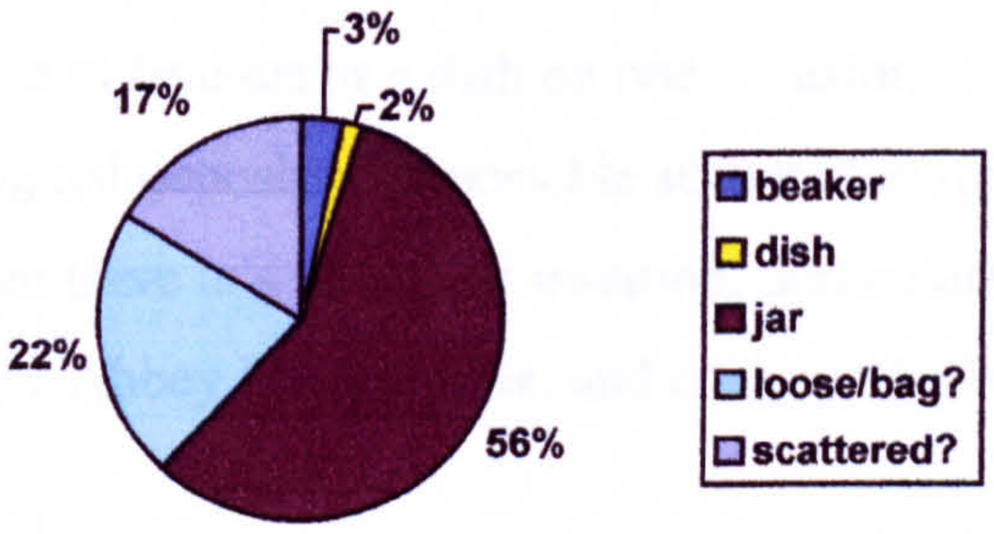

Figure 3.30: overall primary container types at Turner Rise and Abbey Field (n= 60)

Beakers were used as straightforward primary containers in burials G9 and G15 at Turner Rise (Group B) and a dish used on one occasion at Abbey Field (burial F33).

Another important category is the possible scattering of bone within and outside the primary container in ten cases at least from both sites, as already referred to (Turner Rise: G25, G27, G33, G36 and G42; Abbey Field: F32, F35, F66, F115 and F204). In all the Turner Rise cases the primary container 'half used' appears to have been a jar, while beakers appeared to have contained at least some of the cremation deposit in burials F35 and F204 at Abbey Field, and in both the latter and one other case (burial F32) a miniature vessel contained some of the bone.

Because of the (in the main) sequential phasing of the two sites it is acceptable for the sake of demonstration to consider an overall phasing of primary container types.

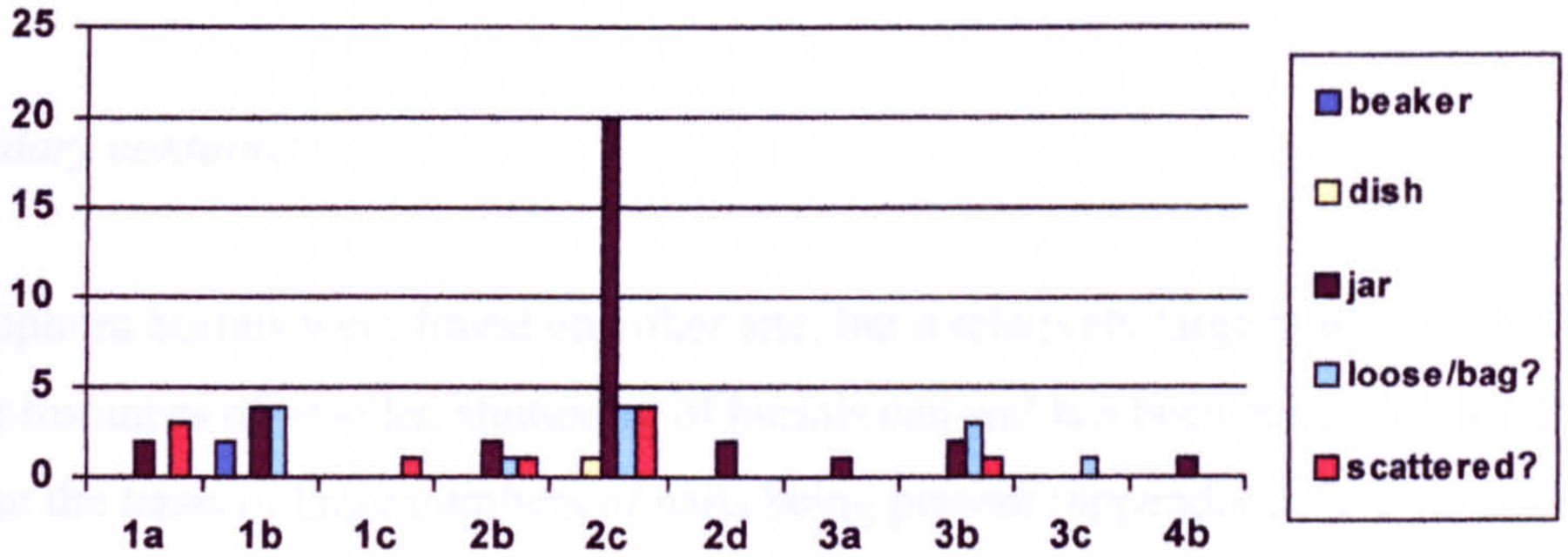

Figure 3.31: overall phasing of primary container types from Turner Rise and Abbey Field (n= 60)

It would seem that the use of beakers or a dish on one occasion are exceptions to norms of jar, loose or bagged deposits and possible scattered burials[6] throughout the phases. It is also clear that there is a strong jar tradition, particularly in phase 2c, which is dominated by the Abbey Field sample, and contains the bulk of the burials overall.

Beakers in apparently 'scattered' burials at Abbey Field (F35 and F204 are colour coat Nene Valley products, and the miniature vessel in scattered burial F32 is evidently a special form. The latter, as well as the overwhelming majority of primary and accessory vessels from both sites appear to be of local manufacture in relatively uniform coarse reduced or grey ware fabrics. However, it is also notable that a number of ceramic primary containers (mainly jars) from both Turner Rise (burials G6, G9 [beaker], G27, G28, G33, G35, G36 and G39) and Abbey Field (burials F81, F153, F158 and F211) can be described as probable or possible 'seconds', being over-fired, warped or asymmetrical.

A number of jars used as primary containers also appear to have been modified at some time prior to deposition. These include instances where only the lower half of the vessel was deposited (burial F95 and F211) and a vessel with a broken base (F158) at Abbey Field, as well as the jar in burial G36 at Turner Rise [no detail

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[6] Or 'combined inurned and unurned' (Shimmin 2004)

available]). It is not clear whether such breakages were in all cases a deliberate ritual action, or a matter of selection of already 'damaged' objects.

Secondary containers

No amphora burials were found on either site, but a relatively large number of boxes and/or instances of wooden shuttering of burials can and has been suggested for both sites on the basis of large numbers of nails being present (appendix 5.5). Shimmin suggests that many of these may result from pyre material or pyre goods (2004, 3), while N. Crummy postulates a minimum of twelve nails being required, although 'numbers lower than this need not preclude the presence of a box' (2000, 24). Yet the 255 nails in burial F84 (which is an undefined burial in any case), as Crossan points out, 'appear to have been dumped in the grave' (2000, 12).

Perhaps the best argument for a boxed or shuttered burial at Turner Rise can be made for burial G18 (Group A, phase 1b), where nine fragments of sheet iron, many with mineralised wood attached, were found forming the rough outline of a box. In the Abbey Field report Crossan argues for nine burials with 'clear evidence for the deposition of nailed wooden boxes…where at least part of the original box outline was indicated by the positions of nails' (*ibid*), these being burials F24, F25, F27, F85, F93, F160, F171, F204 and F211b. Of these, however, it has already been suggested that burials F24, F25, F27 and F204 are possible 'Brandschuttgräber', so deciding whether all or any of the nails in each are derived from incorporated pyre material or a wooden secondary container is not possible using the available evidence. 'Burials' F85, F93, and F160 are all considered here as undefined, given that they also appear to incorporate loose cremated bone and pyre material, and F171 and F211b are not included in this analysis as their respective contexts are too damaged/confused.

Burial F200 at Abbey Field was contained within a tile cist constructed from five apparently complete 'Lydion' tiles forming sides and lid (Crossan 2000, 9, 12; Black 2000, 38, No. 31). All except one of the tiles (no. 664) used in the construction of the cist in burial F200 had tile makers' 'signatures'; although it is not clearly specified whether these were possibly from the same or different workshops, at least two different marks seem to have been present (Black 2000, 38). Also, one of the tiles (no.

662) might be a 'second', in that most of the surfaces had 'grey/black staining as if burned' (*ibid*).

Accessory vessels

The first thing to note in a comparison of overall numbers of accessory vessels at both sites (appendix 5.6) is that despite the lower numbers of burials (as well as less preservation of data) at Turner Rise, the former included 25 accessory vessels from a total of 20 burials included in this analysis, while Abbey Field burial (totalling 43 burials in this analysis) included only 30 accessory vessels. It is also clear that the highest numbers of accessory vessels at Turner Rise belong to phase 1b, while the Abbey Field vessels belong to the relatively few burials from either the earliest or later phases of the site (phases 2b [=2 burials] and 3b–3c [= 10 burials]), despite the fact that the majority of burials were deposited in phase 2c (=28 burials).

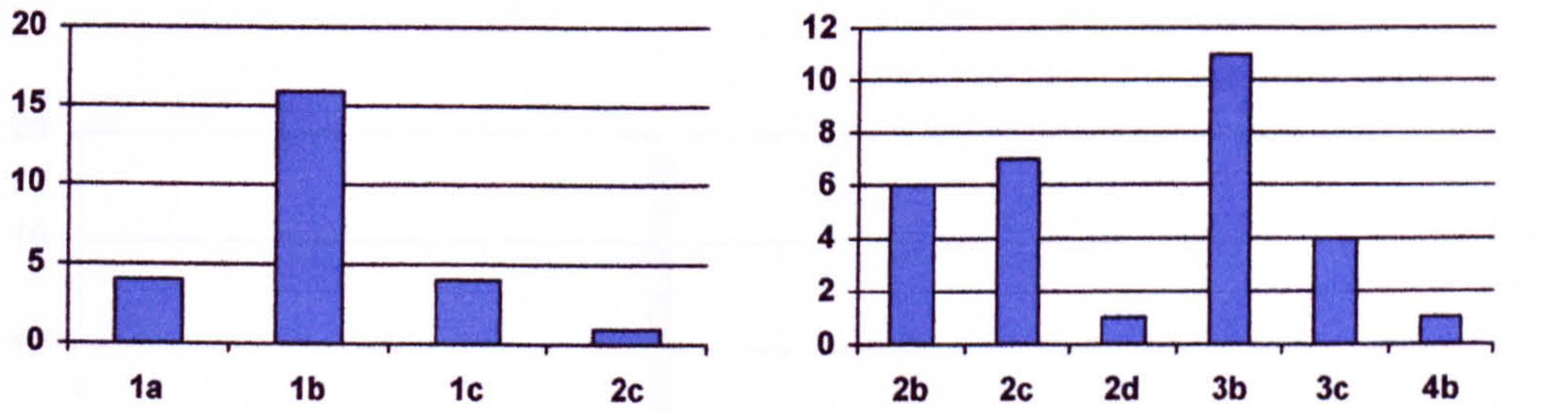

Figure 3.32: comparative phasing of overall accessory vessel numbers at Turner Rise (left, n= 25) and Abbey Field (n= 30)

The lower numbers of accessory vessels overall at Abbey Field is further qualified by a comparison of the numbers of accessory vessels in each burial (although it should be noted that numbers for each burial could only be suggested for 15 of the Turner Rise burials and 40 of those at Abbey Field).

It is clear that a higher proportion of the Turner Rise burials contained either two or four accessory vessels, while the largest group with any accessory vessels at Abbey Field contained only one.

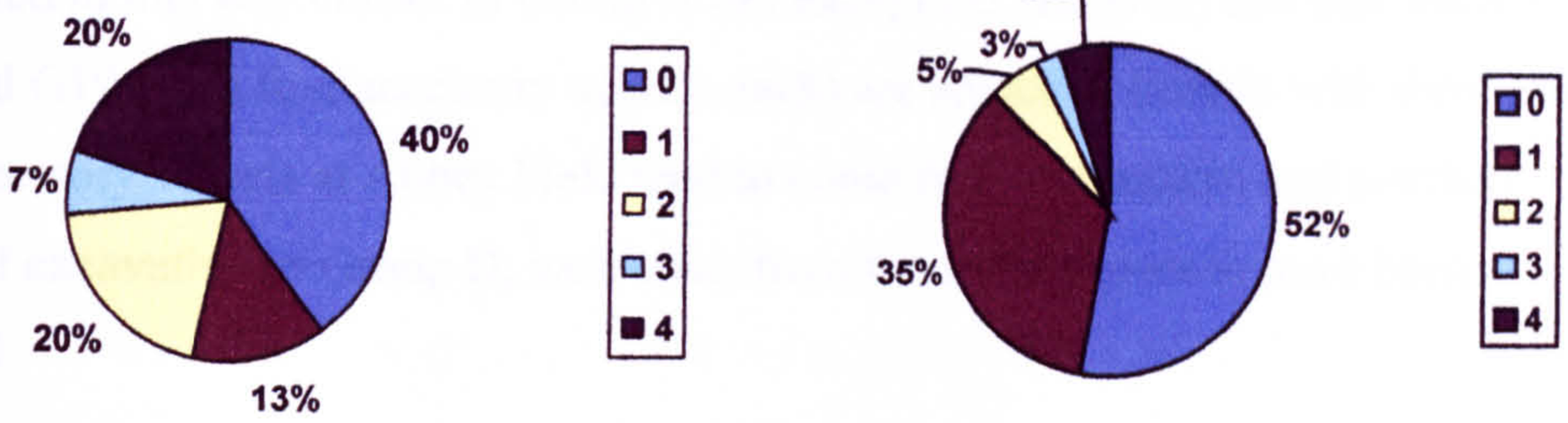

Figure 3.33: comparison of accessory vessel numbers per burial at Turner Rise (left, n= 15) and Abbey Field (n= 40)

The picture is further clarified if phasing is reintroduced, indicating some diversity in numbers of accessory vessels in most phases, but also that a large number of the burials assigned to phase 2c (nineteen, including one burial from Turner Rise) had no accessory vessels (although it should be noted that the necessarily wider date range of such burials may also be a factor here).

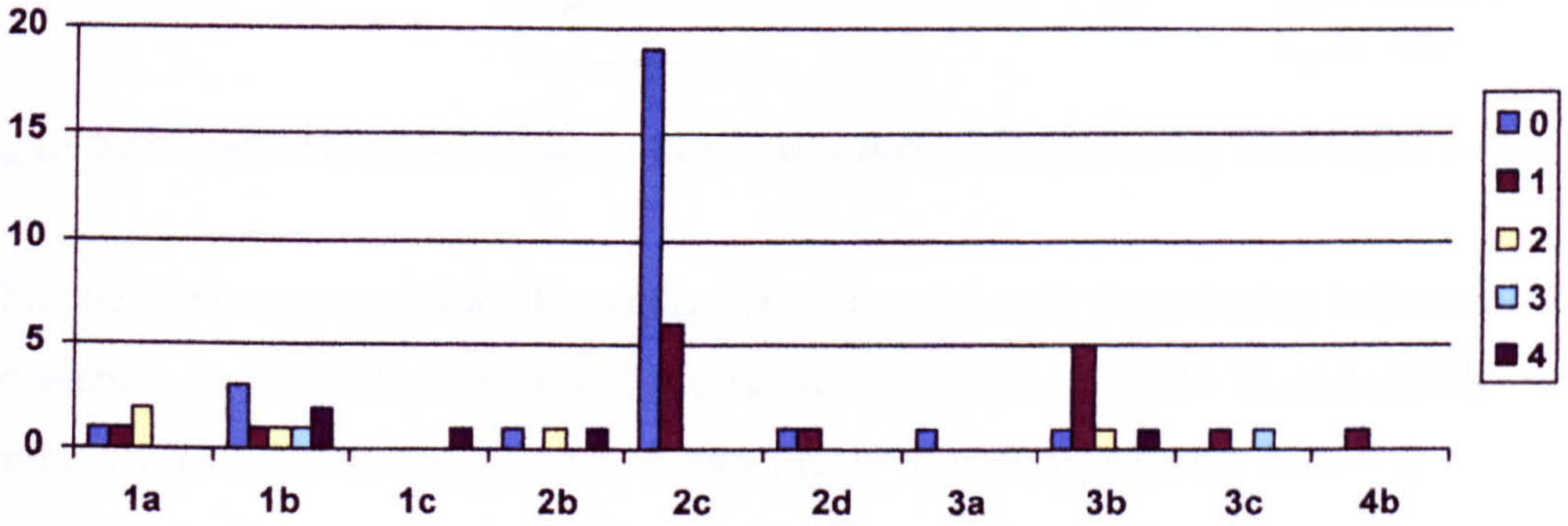

Figure 3.34: overall phasing of accessory vessel numbers per burial at Turner Rise and Abbey Field

Burials with two accessory vessels (G2, G28, G35 at Turner Rise; F24 and F186 at Abbey Field), and especially burials with three accessory vessels (G21 at Turner Rise and F203 at Abbey Field) and four accessory vessels (burials G18, G19 and G42 at Turner Rise; F200 and F204 at Abbey Field) appear to mark some elaboration in terms of sheer numbers.

In this respect it may also be significant that the majority of the Turner Rise burials elaborated in this way cluster in Group A (all except G2 and G42) and that burials G18 and G19 (with four accessory vessels each) are adjacent. Burials with three and four accessory vessels at Abbey Field tend to come from the eastern and southern limits of excavation in Group D, well away from the main cluster to have been exposed.

A similar diversity and range of types of accessory vessels is indicated at both sites (four vessels of unknown form from Turner Rise are not included here).

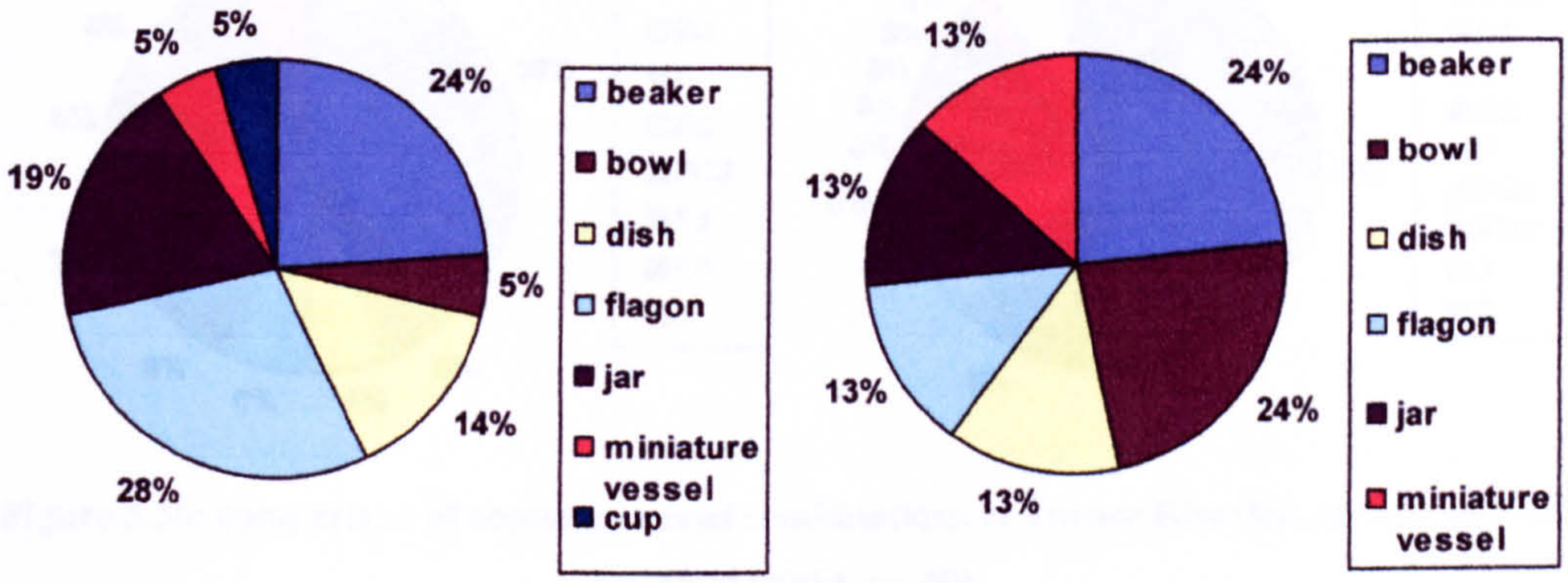

Figure 3.35: types of accessory vessels at Turner Rise (left, n=25) and Abbey Field (right, n= 30)

While beakers are proportionally among the most commonly deposited at both sites and seem to be similarly represented (Turner Rise= 5; Abbey Field= 7), and similar numbers of dishes (Turner Rise = 3; Abbey Field= 4) and jars (Turner Rise = 4; Abbey Field= 4) are represented, it is clear that Turner Rise produced more flagons (Turner Rise = 6; Abbey Field= 4), and that bowls (Turner Rise = 1; Abbey Field= 7) and miniature vessels (Turner Rise = 1; Abbey Field= 4) are more highly represented at Abbey Field.

The use of a samian cup in burial G42 at Turner Rise would seem to be a matter of specialisation of this burial in that a samian dish was also included (i.e. this burial contained two of only three samian vessels securely recorded from the entire site, see below). Burial G18 at Turner Rise was also apparently specialised through the inclusion of a samian dish, and also by reduplication of jar forms. Adjacent burial

G19 included two beakers, while burials F200 at Abbey Field contained 'doubled' flagons.

Combination of types of accessory vessels is a context for much diversity on both sites in all phases. This seems to indicate further that elaboration beyond the more 'standard' form of burial with no accessory vessels was a way of specialising particular burials (Turner Rise burials G6, G9, G26 and G30 are excluded from this analysis on the grounds that combinations are less certain).

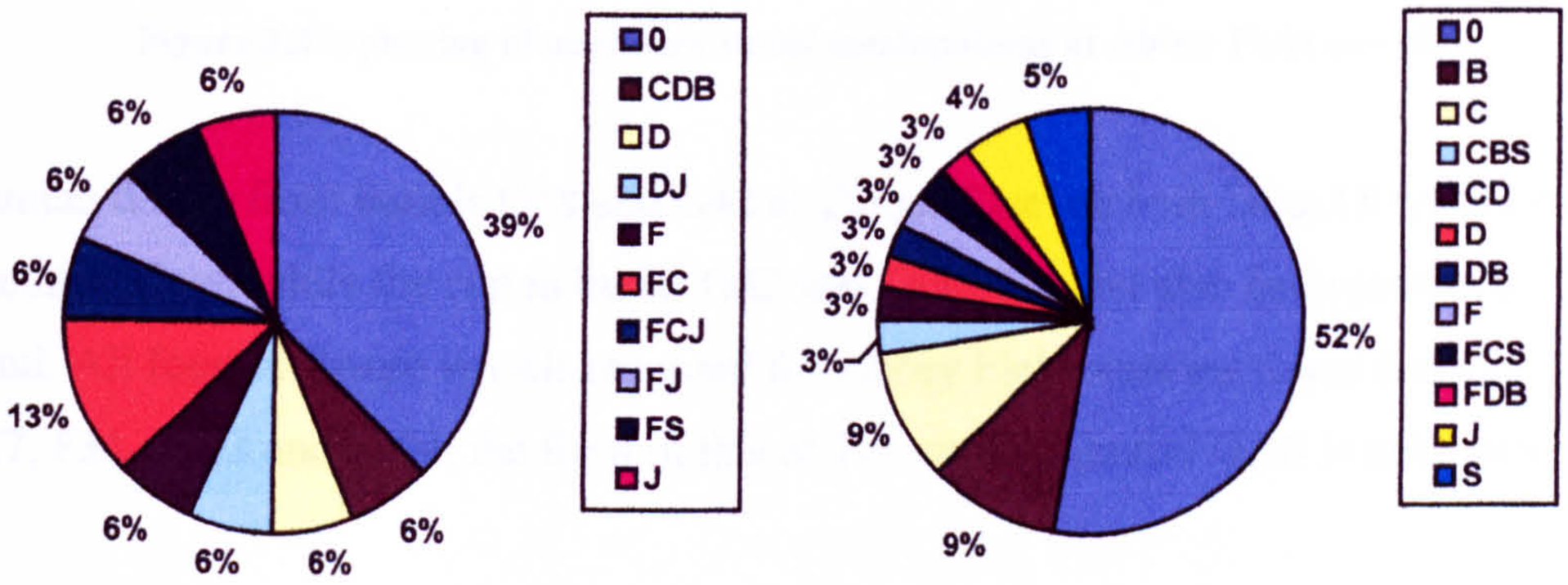

Figure 3.36: comparison of accessory vessel combinations at Turner Rise (left, n= 16) and Abbey Field (right, n= 40)

It should be reiterated however that while the Turner Rise combinations are variable in all phases, the Abbey Field series shows that the overwhelming majority of burials with no accessory vessels come from phase 2c along with the more simple elaborations (one vessel), and that the scarce more complex and diverse combinations are found in phases 2a or 3b–3c.

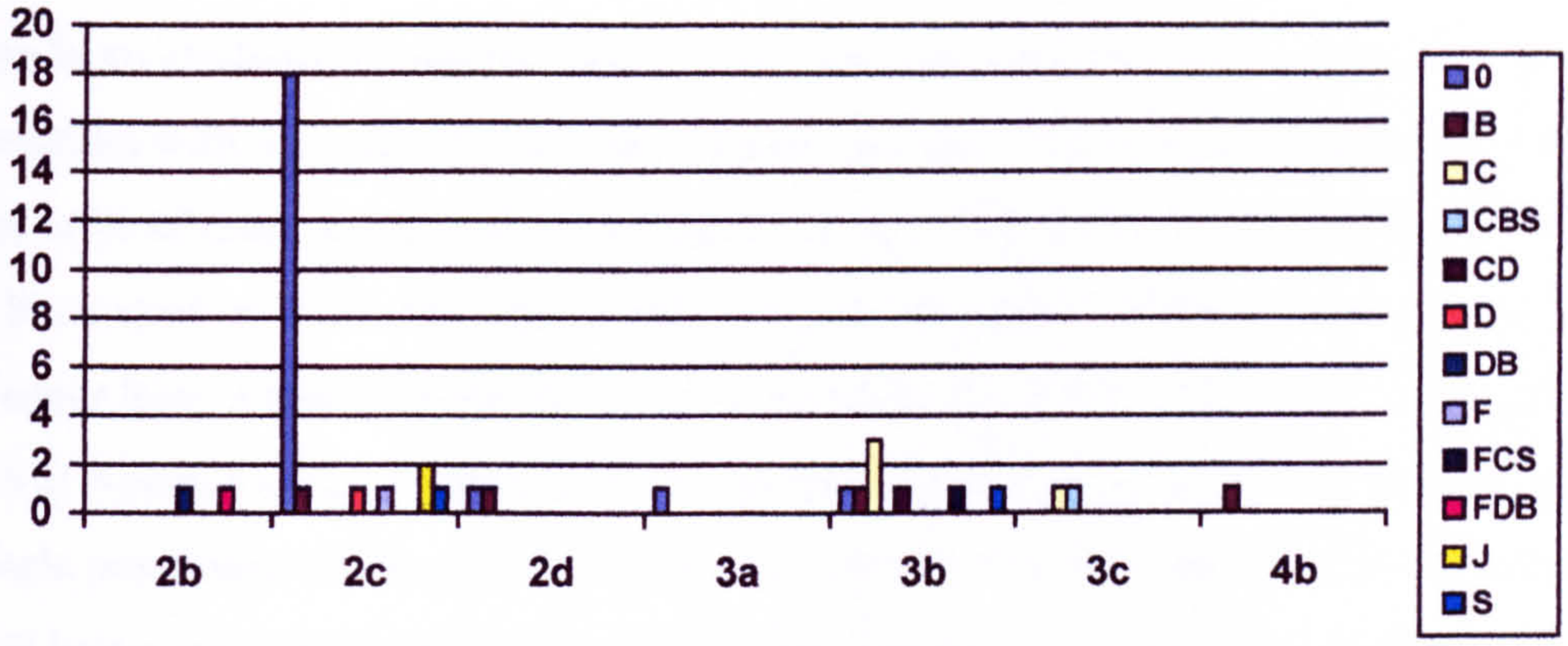

Figure 3.37: phasing of accessory vessel combinations at Abbey Field (n= 40)

Samian dishes from burials G18 and G42 at Turner Rise are both Drag.18 types from southern Gaul, while the cup in burial G42 was Drag. 27, and also from southern Gaul. All four miniature vessels recorded for Abbey Field were jar forms (burials F27, F31, F203 and F204, the form of that at Turner Rise (burial G28) is unknown.

The use of kiln 'seconds' as accessories at Turner Rise seems to have been quite frequent, with 7 of an overall total of 25 vessels affording such a description. These include a beaker and a flagon in burial G19, jars and probable jars in burials G18, G21 and G35, as well as a beaker (burial G42) and a miniature vessel (burial G28). The latter may on the other hand have been burnt, as it was badly blistered on one side, perhaps providing further evidence that this burial also incorporated material derived from the pyre in some way. 'Seconds' (and a possible lower quality vessel) were also used at Abbey Field, although in proportionally less burials, including what seems to be an asymmetrical beaker in burial F25, as well as an over-fired miniature vessel, bowl and flagon in burials F27, F158 and F204 respectively.

The flagon and beaker in loose/bagged burial G3 at Turner Rise may have been deliberately broken in antiquity, perhaps as part of the depositional ceremony, as might the beaker in burial G42, and the samian dish in burial G18 (a sherd of the latter was found beneath another pot), although post-depositional processes should not be ruled out as the cause. At Abbey Field, a dish and bowl in burial F24 may have been broken when deposited, as might jars in burials F23 and F95 (the latter possibly used as a lid).

There is no evidence to suggest that any vessels were placed in the pit according to orientation with the primary container in plan. In fact, complex spatial relationships seem to be of more significance once again. In several cases evidence that open forms had been used as 'lids' survived (a dish and a bowl respectively in burials G4 and G42 at Turner Rise, a dish in burial F39 and bowls in burials F80, F158, F200 and possibly F185 at Abbey Field; a modified jar had possibly been used in burial F95 on this site). Vessels positioned in this way in burials 39, 158 and 200 were all inverted. The latter burial being the cist burial on the site, it is interesting that a 'lid' might be deemed to be required, and even more interesting that an upright dish had been placed upright on top of the inverted bowl in this case.

At Turner Rise, a possible jar in apparent box burial G18 partially rested upright above the loose/bagged bone deposit, whereas flagon and both beakers in adjacent burial G19 seem to have been placed on top of the loose/bagged bone. The miniature vessel in burial G28 was one of two accessories to have been placed on top of the cremated bone within the jar acting as a primary container in this case. Two accessory vessels are recorded as having been placed above apparently loose/bagged bone deposits in burials at Abbey Field, these being a miniature vessel in burial F31 and a beaker in burial F26. In both cases where accessory vessels were 'doubled' (G19 at Turner Rise with two beakers and F200 at Abbey Field with two flagons) the vessels concerned were placed sided by side. Finally in this area, the beaker in 'burial' F186 at Abbey Field (no cremated bone present) had been placed above a dish.

Other accessories

Inclusion of other accessories (at least on the basis of available data) at the deposition stage at both Turner Rise and Abbey Field was rare (appendix 5.7), and particularly in the former case, it would seem. A total of 16 other accessories are recorded from 8 of the burials.

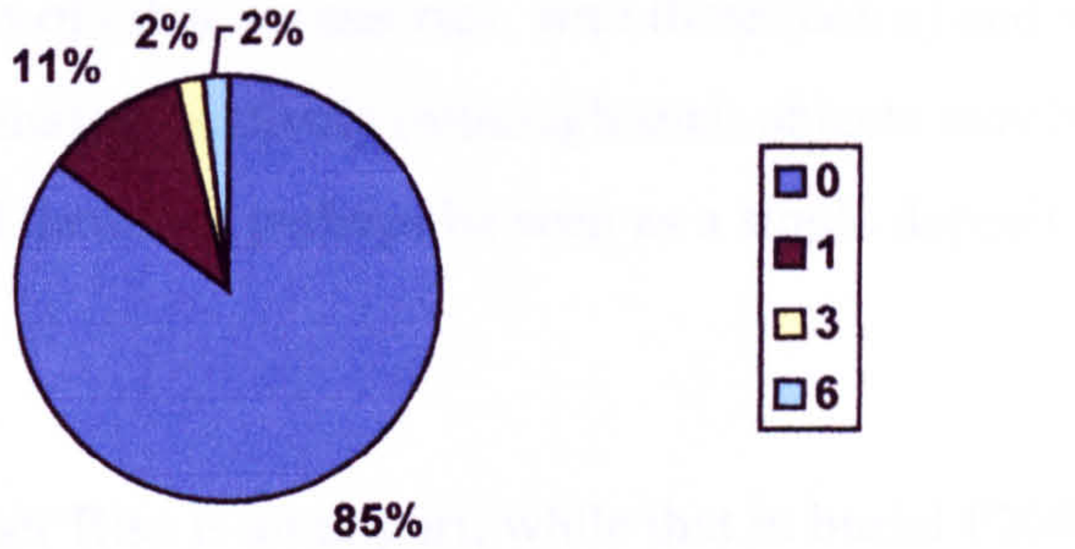

Figure 3.38: numbers of other accessories per burial at Turner Rise (n= 15) and Abbey Field (n= 38)

Only two of the fifteen burials where a count can be confidently established at Turner Rise (burials G6, G9, G26 and G30 are once again excluded from this analysis on the grounds that contents are less certain) contain one other accessory each, these being burial G28 (phase 1a), containing a brooch, and burial G42 (phase 1c), containing a ceramic lamp. Moreover, of a total of 38 sufficiently secure burial contexts at Abbey Field (excluding burials F21, F22, F33, F145 and F193 as not confidently understood in this area), only seven burials account for the remaining fourteen other accessories known from that site. These include several coins (one in burial F22, two in burial F25 and three in burial F204), a ceramic lamp (cist burial F200), a small pewter cup or dish (burial F32), a stone or glass disc (burial F82 [not described]), three armlets and a necklace in burial F25, and finally a penannular armlet associated with burial F21.

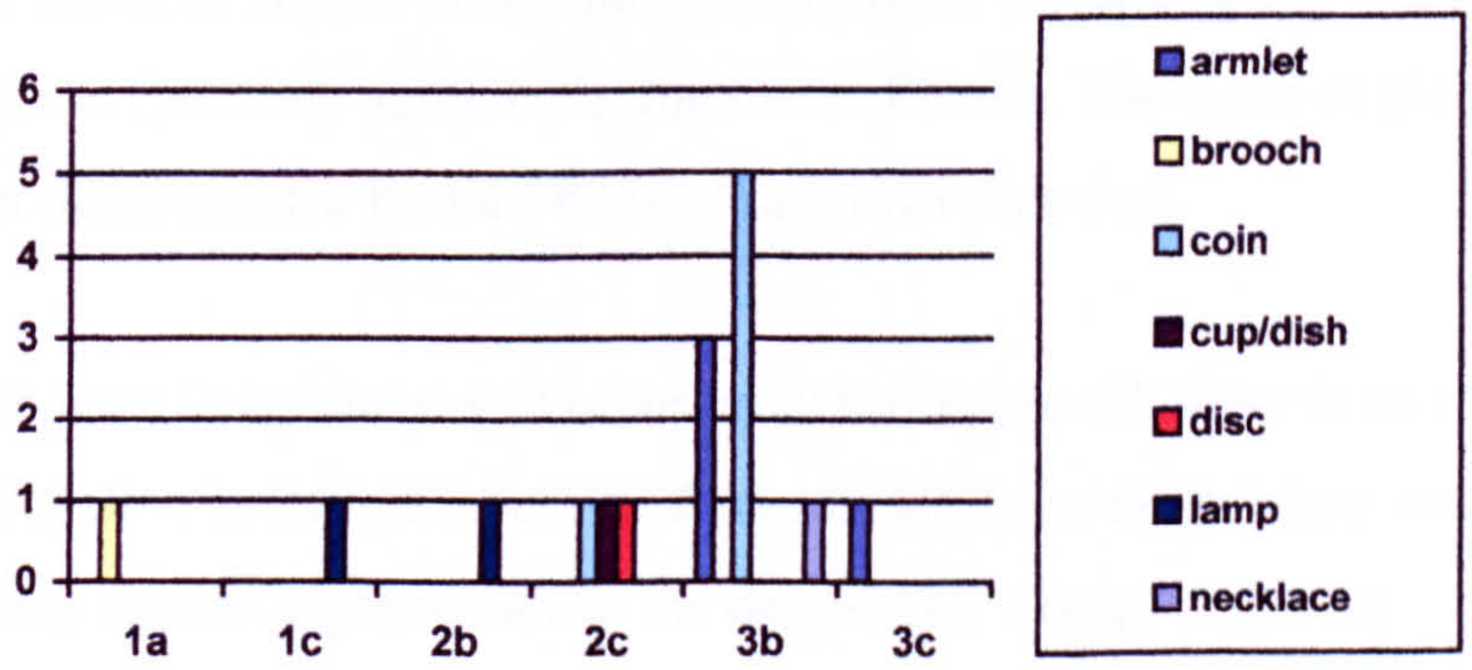

Figure 3.39: phasing of other accessories at Turner Rise and Abbey Field

Burials F204 and especially F25 (both phase 3b) therefore seem to have been particularly specialised in terms of other accessories, with three (coins) and six (three armlets, a necklace and two coins) respectively (although such objects may have been deposited in groups and should therefore perhaps be seen as a single deposit in each case, perhaps in bags).

The lamp in burial G42 at Turner Rise is an import, while that in burial F200 at Abbey Field is not given a provenance. At Abbey Field the coins deposited in burials F25 and F204 seem to have been old at the time of deposition and may have been amuletic; all the coins are of similar original monetary values.

Phase	Burial	Description	Age at deposition	Small Find No.
2c	F22	Antoninus Pius, *sestersius*, reverse Annona	unknown	4
3b	F25	*sestertius*, very worn, uncertain issue	Old	7
3b	F25	*sestertius*, very worn, uncertain issue	Old	7
3b	F204	*sestertius* of Faustina II, reverse uncertain	Old	61
3b	F204	*sestertius* of Faustina 1, as RIC(AP) 1509	Old	59
3b	F204	*sestertius* of Antoninus Pius, as RIC(AP) 1281	Old	60

Figure 3.40: table showing types of coins from Abbey Field burials

Items for personal ornament in burials, such as the pre-Boudican 'Colchester' brooch in burial G18 at Turner Rise, the penannular amulet in burial F21 and especially the armlets and necklace in burial F25 at Abbey Field are perhaps particularly worthy of note. The necklace in the latter collection comprised 127 interlocking jet beads, the armlets were of shale, of copper alloy, and finally one of threaded glass and jet beads with two jet objects (possibly amulets) in the form of bears. The stone or glass disc reported but not described for burial F82 is of unknown function.

Particularly with such low numbers of other accessories overall, there is no evidence to suggest that location in the pit in terms of orientation from the primary cremation deposit was of any special significance to the depositors. Complex spatial relationships, on the other hand, can be seen as a context for possible specialisation in several cases. The brooch in burial G28 at Turner Rise, for example, was one of at least two items apparently placed on top of the cremated bone within the primary

container (the other being the miniature vessel in this burial). All of the armlets and necklace in burial F25 at Abbey Field were found clustered together as though placed in the burial in a bag or deliberately piled one on top of the other, and the three coins in burial F204 also appear to have been deliberately grouped.

Combined selection

A phased comparison of combined selection of objects for deposition (see figure 1.17, Chapter 4 and notes to appendices) at both sites (appendix 5.1) once again seems to show an overall picture of some considerable diversity set against a comparatively simple 'CN0000' background (15 burials from Turner Rise and 39 burials from Abbey Field were sufficiently intact to allow for such an analysis). At Turner Rise, for example, there seems to be diversity in primary and secondary containers and accessory vessels in particular in the main early phases, the latter two burials being comparatively simple.

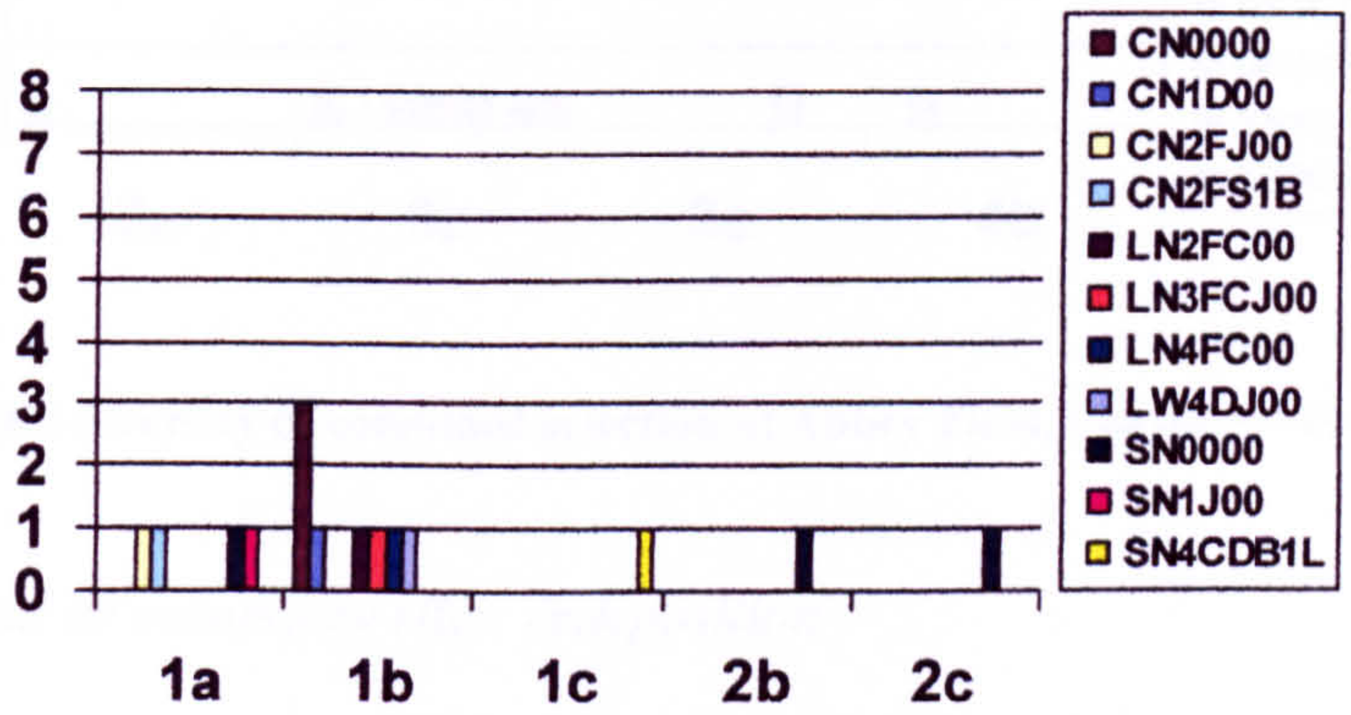

Figure 3.41: diversity of combined selection at Turner Rise, Phases 1a–2c (n= 15)

The earliest phased burials at Abbey Field are relatively elaborate, but the majority of burials in phase 2c seem to be comparatively simple, with only minor deviations in terms of primary containers, as well as occasional accessory vessels and other accessories.

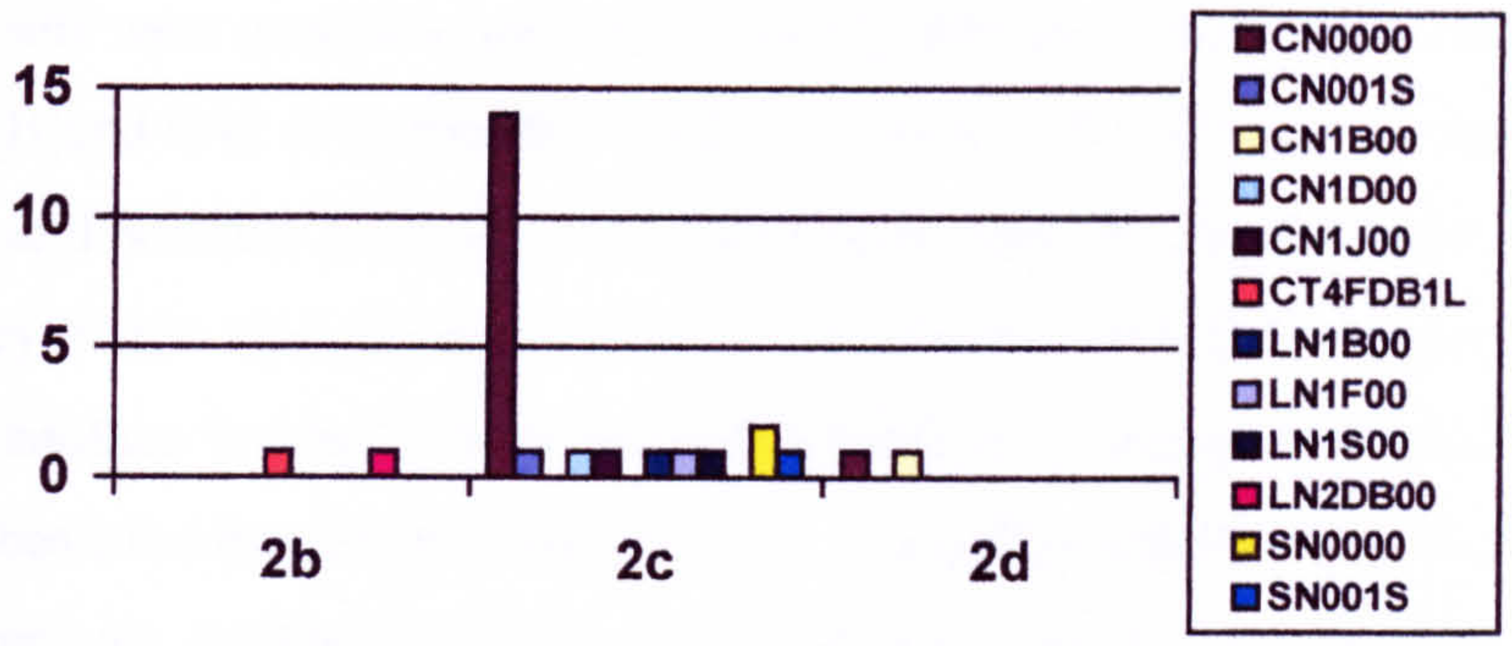

Figure 3.42: diversity of combined selection at Abbey Field, Phases 2a–2d (n= 27)

On the other hand the later phases at this site present a more diverse picture and several burials seem to be among the most specialised from either site.

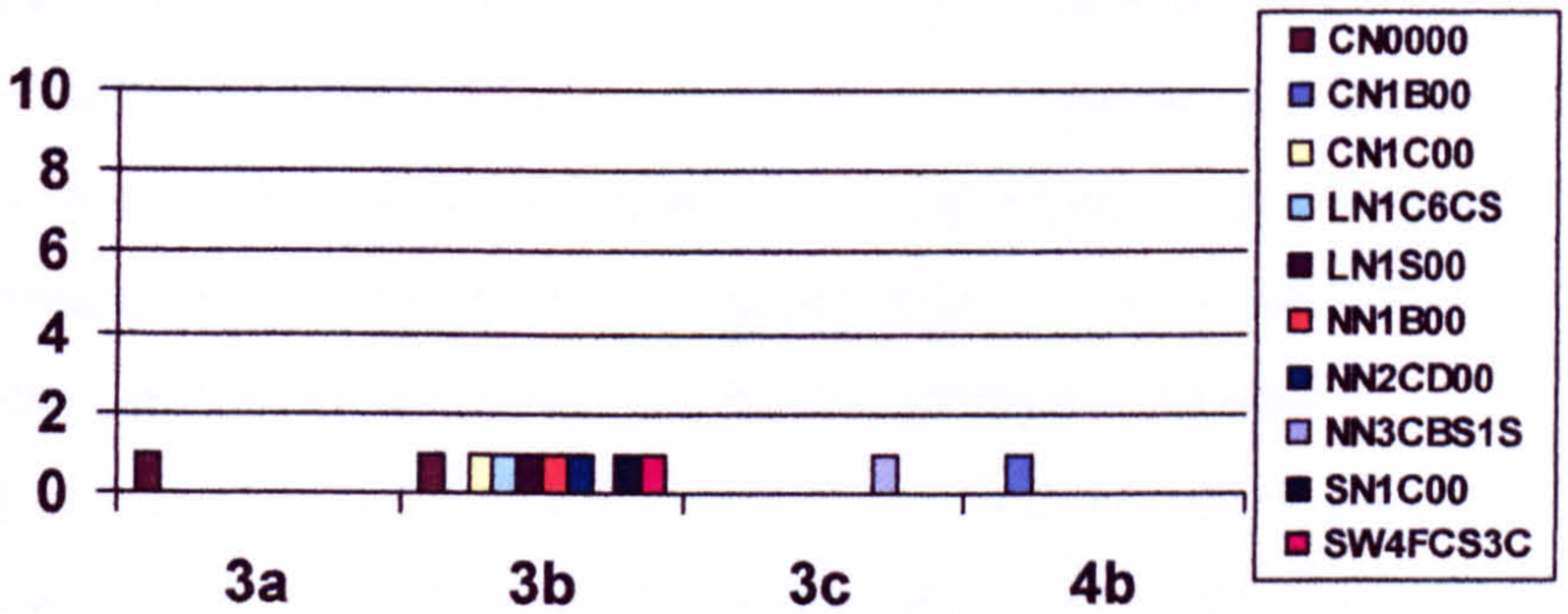

Figure 3.43: diversity of combined selection at Abbey Field, Phases 3a–4b (n= 11)

Post-depositional or secondary rites, redeposition

Burials in groups A and B at Turner Rise, despite being clustered (and excavated in difficult conditions) do not appear to inter-cut in many, if any cases, suggesting a system of some sort for avoiding previous burials (perhaps markers). In the northern areas of groups C and D at Abbey Field (i.e. those parts of the site excavated to the level of the natural and therefore where horizontal stratigraphy is understood) seem to show a similar picture. Burials appear to be more widely spaced in Group C than Group D.

The use of various types of 'lids' for burials (appendix 5.8) is also apparent at both sites (relative levels of truncation must be borne in mind here). As has been noted,

ceramic vessels were used in a number of cases (a dish and a bowl respectively in burials G4 [B]and G42 at Turner Rise, a dish in burial F39 and bowls in burials F80, F158, F200 and possibly F185 at Abbey Field; also a possibly modified jar in burial F95 at Abbey Field). Also, in one case at Turner Rise an actual lid was possibly used (apparently another 'waster' or kiln second) in burial G35, and a fragment of copper alloy strip above the miniature vessel in burial G28 perhaps derived from a wooden cover of some sort. At Abbey Field, a large fragment of brick was used as a lid for the primary container in burial F72 while a *tegula* fragment was used for the same purpose in burial F211.

The probable box in burial G18 at Turner Rise suggests that revisiting of the burial may have been afforded after initial deposition, as do possible boxes at Abbey Field (burials F24, F25, F27, F85, F93, F160, F171, F204). Certainly the tile cist of burial F200 could well have allowed continued access to its interior; we might remember particularly in this case that contemporaneity of deposition of objects within is only inferred through spatial association. It is therefore even more notable that an inverted bowl was used as a lid for the primary container (despite its protection by the tile lid of the cist), and that an upright dish had been placed on top of the bowl. Did such objects (as well as the lamp and two flagons included in the burial) continue to be used in secondary or post-depositional ceremonies, or were they left there at different times?

Profile

Possible site level traditions

Without records of the diagnostic features of cremated bone, it is impossible to assess variability of pyre construction and maintenance within and between the two sites. The lack of an overall dataset from environmental sampling of cremation deposits means that assessments of diversity in pyre goods including animal offerings are also limited (although the diversity of animal types from a relatively small sample may indicate a generally diverse local profile. Analysis of weights of cremated bone from undisturbed deposits also indicated varied and always 'token' amounts, suggesting

that general collection practice was not uniform (although this may be a function of not sorting cremated bone from pyre residues).

From albeit tantalising evidence based on both general observations on the part of excavators and selective sampling, the two most important possible local traditions in terms of cremation relate to particular pyre goods and deposition of pyre material. In the former case it would appear that footwear is associated with the pyre stage of ritual as opposed to deposition on both sites, where none of the convincing cremation burials contained evidence of intact footwear being placed in the burial, but several probable pyre related deposits contained varying but sometimes large numbers of 'disarticulated' hobnails. Secondly, pyre material seems to be present in a significant number of burial 'backfills' and even primary containers; this may indicate a local tradition more in keeping with the various types of 'Brandschuttgräber' reported from the continent, but a good deal of further research into undefined burials as well as the other environmental samples taken at Abbey Field is required before further suggestions can be made.

In terms of primary containers, the jar (or probable jar) is by far the most common object selected, although in a significant minority of burials cremated bone (or cremated bone and pyre material?) appears to have been scattered in the grave (even if post-depositional processes and excavation conditions are taken into account). Beakers and flagons are common accessory vessels where deposited.

Chronological patterns

As we are dealing here with two different sites with little chronological overlap, patterns are difficult to establish without the comparative material of other Colchester burials (for which data have not as yet been synthesised); aspects that warrant such comparison include the use of beakers on at least two occasions as primary containers in the early phase, a possible general increase in burial in phase 2c (mainly of burials with only ceramic primary containers and no accessories, which may account for their grouping within this phase as dating parameters are likely to be less certain), and an increase in diversity of deposition in phase 3b.

Spatial sub-groups

Groups A and B at Turner Rise certainly seem to represent spatial sub-grouping, but excavation conditions preclude a detailed comparison. At Abbey Field, it has been noted that burials on the western side of the possible track-way (Group C) seem to be more widely spaced than those to the east (Group D); there is also a noticeable cluster of loose/bagged or 'scattered' burials in the northern area of Group D, some or all of which might specifically be 'Brandschuttgräber', although further analysis and research is needed in order to be more certain.

Sex/age groups

Despite the especially low degree of resolution offered by the bone data for these sites in terms of sex or age of the deceased, both Benfield (2000, 13–14), in terms of the use of small or miniature vessels at both sites, and N. Crummy (2000, 21), because of the small diameter of armlets in burial F25 at Abbey Field, attempt to diagnose child burials on the basis of grave goods. It should be remembered however that other interpretations can be offered in what is, after all, a specialised mortuary context.

Other groups

Benfield argues for a general relative poverty at Turner Rise in terms of the more frequent use of kiln seconds or wasters as compared with the Abbey Field burials (although it has to be said that the marginal chronological overlap between the two sites argues against such a comparison), but again it is necessary to remember that we are dealing with a mortuary context that does not necessarily simply correlate with the status of the living. The similarities between adjacent burials G18 and G19 in terms of primary container and number and type of accessories is worthy of note, as is the apparent cluster of possible 'Brandschuttgräber' in the northern part of Group D at Abbey Field.

Other groupings (of unknown qualification) are suggested by the depositional divide between burials with no accessories and burials with accessories, especially in phase 2c at Abbey Field.

Burial level diversity

The use of a dish as a primary container in burial F33 at Abbey Field is unique in the sample, and secondary containers for burials G18 at Turner Rise and F200 at Abbey Field appear to be particularly specialised. Once again, however, it is in the diverse selection and combinations of accessory vessels and occasional and sometimes elaborate provision of other accessories (e.g. burials F24 and F204 at Abbey Field) that a little more than half (33 of a total of 53 burials analysed for combined selection) of the burials seem to have been made unique. Complex spatial features occasionally add to this pattern (such as the placement of other accessories within the primary container in burial G28 at Turner Rise, or the complex arrangements of objects within the cist of burial F200 at Abbey Field).

Sites profile

The possible incorporation of pyre material in a significant number of burials at both sites is especially interesting in comparison with other case studies, and there would appear to be a case for more detailed research in this area, especially if and when further data become available. The apparent lack of footwear at the deposition stage is also most interesting in comparison with other areas. Despite a large group of apparently simplistic and non-elaborated burials assigned to phase 2c, especially at Abbey Field, there is still evidence of considerable diversity and possible specialisation of burials both in terms of combined selection of objects for deposition and in some cases burial design and complex spatial features.

Local profile

Although a considerable amount of data (mainly in the form of objects) have been collected from around Colchester during the nineteenth and twentieth centuries (appendix 7.3; see May 1930, 249–296, and plates LXXV–XCIII; Hull 1958, 250–259, P. Crummy 1993), much of this material (now held in Colchester Museums) is derived from antiquarian collections. As a result of collection biases, an enormous amount of information about spatial features and combined selection in particular has

been lost. Moreover, the archives have not been so far been discussed in relation to detailed chronology in any published syntheses (to develop such an understanding of the material would constitute an extensive research project in itself). This precludes chronological comparisons here, and a more general comparison will have to suffice at the present time. Comparative data for cremation are again unavailable, and the results of recent 'watching briefs' (see Appendix D) have not produced a sufficient quantity or quality of data.

The recording work of William Wire in the nineteenth century provides some early comparative material for the Turner Rise site. Some localised diversity is suggested by the finding of two amphora burials (Phase 2b?), one containing a coin as well as a ceramic primary container with a lid, the other six glass vessels (Hull 1958, 257) in a railway cutting to the south-west of the Turner Rise site. Further reports of 'thirty-two graves consisting of groups or single vessels... [including] ...two fine glass urns...' (Hull 1958, 257) being found in this area (generally Hull's 'Northern Cemetery') in 1928 and 1929 again suggests diversity in numbers and types of accessory vessels especially (Colchester Museums Reports 1929, 21, nos. 232–235; 1930, 29ff, nos. 239–265).

Burials from the area of Abbey Field in general, according to Hull, 'can rarely be plotted' (Hull 1958, 255). Initial levelling of part of the field for a nineteenth century football pitch apparently produced an 'immense number of pots, etc. They were arranged on the outside a very large pot every few yards and between and inside many smaller ... (T)here were many hundreds' (*ibid*). Such a vague description appears to reflect primary containers (and/or amphorae as secondary containers) as well as accessory vessels being uncovered but unrecorded (even in terms of definitive groups of vessels).

No details are available of the 28 burials, 'mostly in very fragmentary condition' (*ibid*), recovered by E.J. Rushdale and F. Farmer in 1925 on the site of the Garrison Sports Pitch (site of the Abbey Field excavation reviewed in this chapter).

In a more general sense, an overview of previous discoveries in Colchester provides little comparative material in terms of combined selection or spatial features of

burials. The usefulness of May's publication of Colchester 'grave groups' from the Joslin, Jarmin and Taylor Collections held in the Colchester Museums (May 1930, 249–296, and plates LXXV–XCIII), and M.R. Hull's continued inventory of 'graves' (P. Crummy 1993) that added to that original list is limited by collector and curator bias as well as in recording standards. As P. Crummy points out, 'uncertainty in the actual numbers of cremations makes estimating the numbers of vessels per cremation very difficult. The problem is further compounded by the fact that many of the graves represent more than one burial' (1993, 257).

Not many of May's 'groups' as published (1930, 249–296, and plates LXXV–XCIII) are particularly convincing (albeit from an intuitive perspective), often including more than one large jar (these might more often be expected to be singular as primary containers in cremation burials), or no apparent primary container at all. Moreover, particular types of accessory vessels and other accessories of perhaps more obviously intrinsic interest (glass 'urns', face pots, samian, miniatures, 'tettines', tazze, lamps, figurines etc), or complete burials protected by tile cists, seem to predominate. Of particular note here of course is May's 'Grave 3/124' from the Joslin Collection, which includes '13 vessels, 21 figurines, 36 coins, portions of bone handles, combs, cups, caskets damaged by firing…' (*ibid*, 251, Plate LXXV). Such burials practically select themselves in the eye of the collector. Yet despite what would seem more likely to be a selection process carried out by original excavators and collectors than on the part of original depositors, there is nonetheless much diversity in types of object in these early collections.

P. Crummy (1993) estimates the 'typical' cremation burial from Hull's inventory as comprising a large ceramic vessel as primary container and perhaps one accessory vessel and no other accessories, the average overall number of vessels being about 2.4 vessels per burial (1993, 257). Such homogenising obviously masks much diversity in numbers and types of objects between burials. Consider for example, Hull's Grave 302 from Sheepen in the 1930s, with a modified amphora containing 'a wooden box or casket, nine pottery vessels, two glass vessels, a lamp, two brooches, a mirror, a knife, a bone pin, twenty beads, and various other small objects. Outside the amphora lay a flagon' (*ibid*, 265–266, see Fig 8.7). Hull also reports an elaborate box burial from St. Clare Drive, Colchester, Essex (Hull 1942, 59–65), containing ten

continental brooches, two bracelets, a glass phial as well as two flagons, five bowls and five dishes (including samian).

On the other hand, the lower average number of vessels and other accessories per burial given by Crummy suggests that collection methods since 1930 have been less selective of large and especially interesting groups. Even so, other biases are evident. For example, Crummy points out that there is 'no clearly documented example of a cremation having been buried without being in a container of some kind' (*ibid*, 265); although it should be noted that Hull does quote at least one example of such a loose or bagged burial from Wire's description of a burial where the cremation deposit had been placed on a tile 'without any protection from the earth' (Hull 1958, 256).

And yet there are some possibly significant comparisons to be made between the recent recorded findings at Turner Rise and Abbey Field and the overall body of material despite the apparent problems with the latter dataset. Crummy notes for example that fused glass bottles probably associated with the pyre are 'especially common' among other possible pyre material 'often' included (P. Crummy 1993, 257; this seems to be evident even in the early collections illustrated in May 1930, see grave nos. 3, 7, 9, 19, 29, 37, 42, 44, 45, 56, 75 and 81). Might such material result from inclusion of mixed and unsorted pyre material in Colchester burials (so that they are more like 'Brandschuttgräber')?

From another perspective, cist burials seem to form an interesting depositional sub-group (cf. the apparently few burials contained within lead *ossuaria*; see P. Crummy 1993, 267–268, Fig 8.8). In particular Hull Grave 81 from the West Lodge area (one of the few early discoveries of burials to have been illustrated *in situ*, see P. Crummy 1993, 260, Fig 8.3), is remarkably similar in its components to the Abbey Field cist burial (F200, above), including a jar, two flagons and a lamp within a tile cist. Despite the current paucity of available evidence, tile cist burials in the Colchester assemblage might repay some further investigation.

Perhaps even more interesting is the lack of examples of cremation burials with footwear; again, collection expectations and methods may well have 'filtered out' such material in the past, yet its absence still supports the possibility that footwear

were not associated with the deposition stage of Colchester burials. It might be instructive to note that the two cremation burials nearest to Colchester recorded by Philpott as containing footwear, at Kelvedon (Rodwell 1988; Philpott 1991, 275), were both late fourth century and in neither associated with an 'urn'. It is therefore equally likely that these were not cremation burials at all, and that this component is represented by even fewer burials in Essex as a whole than Philpott suggests (1991, 165), leaving only two other examples cited by Philpott at Stanford-le-Hope and Stanstead (1991, 275).

Taken as a whole, the evidence for Colchester as presented by May (1930), Hull (1958) and P. Crummy (1993; see also the five variant cremation burials from the Butt Road excavations [N. Crummy and Crossan, 1993], as well as more recent Sheepen data [Niblett 1985]) seems to conform to a picture of increasing diversity among the more 'peripheral' classes of object (i.e. beyond the primary container type). A general suggestion can be made that ceramic jars are indeed the main type of primary container (with some diversity in the form of occasional lead or glass containers; it should also be noted that loose/bagged cremation deposits are largely 'invisible' in the earlier discoveries); diversity increases however with sporadic use of secondary containers, and especially in terms of the numbers and types of accessory vessels and other accessories.

Complex spatial features, such as inversions of vessels and placement of objects within primary containers, are already present in May's 1930 catalogue reflecting a further province of diversity at burial level. Hull Grave 126 from West Lodge (P. Crummy 1993, 260, Fig 8.3), where two beakers seem to have been inverted side by side, is a particular example of the former type of variant, while placement of certain objects such as glass phials or lamps within the primary container and on top of cremated bone is not infrequent (see May 1930, 249–296: various).

10. London case studies: the Eastern Cemetery

Introduction

This chapter considers the collective data from the twelve archaeological sites (including that at West Tenter Street), all apparently forming parts of extensive cemetery on the eastern side of Roman London. Previously unpublished data on cremated bone from Whytehead's excavation of 1984 (Whytehead 1986) was included for analysis in the more recent publication (Barber and Bowsher 2000) with eleven other excavations, the latter having been carried out ahead of various developments between 1983 and 1990 within an area covering about 12ha in modern borough of Tower Hamlets. 29 separate burial 'plots' are defined by Barber and Bowsher (2000, Fig 9), apparently focussing on a road branching off the main Roman London-Colchester road. As many as 160 'cremation burials' (including those from West Tenter Street, a putative 'bustum' and a significant number of apparently redeposited or otherwise not clearly understood features) were subjected to cutting edge analysis in the report, from which most of the data analysed below are derived (although for a number of areas, such as details of location of objects in plan, the original archive has had to be consulted).

Pyre related deposits were also recorded and analysed in the more recent sites, including small deposits and large spreads of material representing the cremations of numerous individuals. A considerable amount of environmental data were collected from pyre related deposits, cremation burials and the one possible 'pyre site'. The West Tenter Street data are derived from Whytehead 1986; Waldron 1986; Pierpoint 1986; Lloyd-Morgan 1986; Barber and Bowsher 2000, while the data from the rest of the sites area derived from Barber and Bowsher 2000; Wardle *et al*, 2000; McKinley 2000b; 2000c; 2000d; Davis and de Moulins 2000; Betts 2000, and the archive housed at the Museum of London Archaeology Service.

Burials 157, 161, 196, 432, 462, 483, 541, 555, 579, 608, 770, 810, 812, 815, and 816 (mostly 'un-urned' with some 'redeposited') have been excluded from this analysis on the grounds that they were too disturbed for meaningful comparison. A further 35

loose or bagged 'burials' contained quantities of carbon, 'pyre goods', potsherds, nails etc, and might represent alternative or disturbed pyre material deposits, or 'Brandschuttgräber' (some evidence of the latter is explored, see below). Because of a lack of sufficient data or defining criteria in most cases, these features are considered separately here as 'undefined burials'. Moreover, the pyre site is considered separately here, and finally, at least 20 burials, thought by excavators and specialists to have been 'redeposited' on grounds of observed stratigraphy in comparison with dating of contents, are also analysed separately as a control; a total of 89 reasonably secure cremation burials in apparently original contexts (or 90 if 'dual cremation burial' 195 is interpreted as two burials) are therefore included in the more detailed profile here.

Cremation burials were recorded as present within a number of 'plots' (see Figure 3.44) at the western end of the cemetery, so far as it is known, nearer the town wall and to the north of the road (plots 1, 2 and 3 hereafter referred to as Group A), slightly to the east of these and south of the road (plots 16 and 17, the West Tenter Street site, hereafter referred to as Group B), and in two phases of plots further to the east and also south of the road (plots 20 and 21, and plots 22, 28 and 29, from now collectively referred to as Group C).

Plot differences as interpreted in the original report (Barber and Bowsher 2000) have been maintained in this analysis so that these factors can be considered; it is notable for example that there are only two burials securely located in chronologically consecutive plots 20 and 22 (813 and 814), and that these are both considered to have been redeposited. The exact locations of two further redeposited burials (815 and 816) are unknown and these are not included in this analysis. However, the consecutive numbering of these and those formerly mentioned may also suggest that they were in plots 20 or 22.

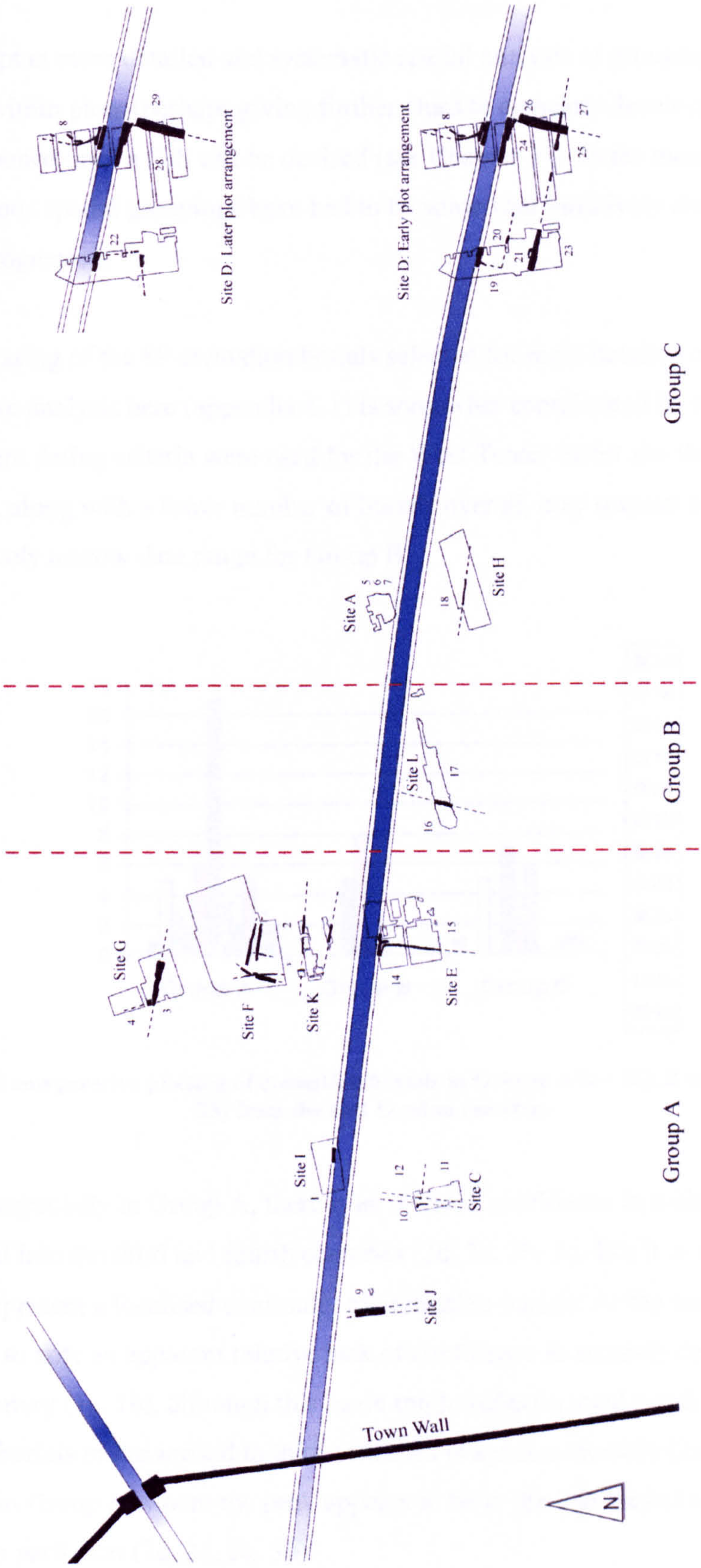

Figure 3.44: Various plots of the east London cemetery, in relation to the town wall (after Barber and Bowsher 2000, Fig. 9)

Any attempt at more detailed and systematic spatial analysis of groupings, qualities, or trends within plots (perhaps giving further clues to cemetery development etc) has been postponed until a GIS can be devised (see Chapter 11). In the meantime, the more obvious spatial groupings have had to be somewhat intuitively checked as analysis progressed.

Overall phasing of the 89 cremation burials selected for more detailed and comparative analysis here (appendix 6.1) is somewhat complicated by the probability that different dating criteria were used for the West Tenter Street site than all other sites. This, along with a lower number of burials overall, may account for the comparatively narrow date range for Group B.

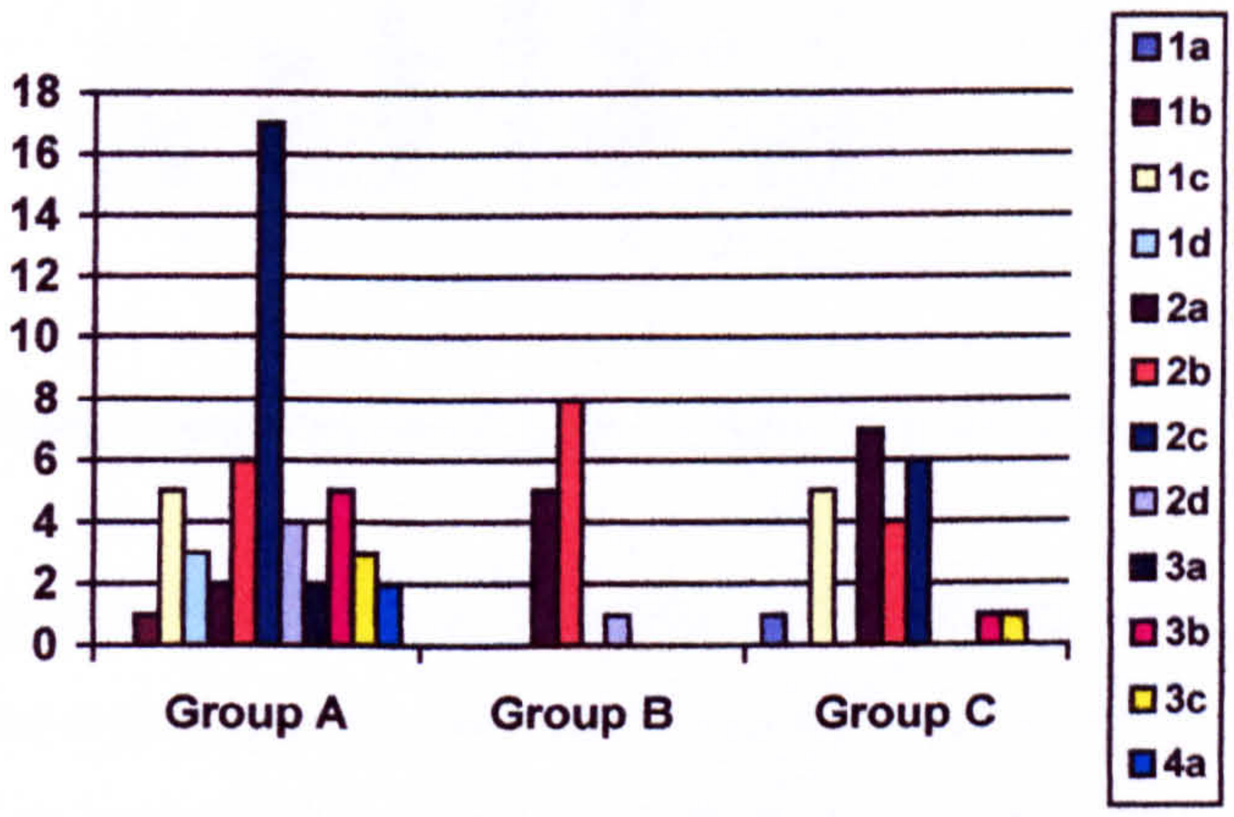

Figure 3.45: comparative phasing of cremation burials in Groups A (n= 50), B (n= 14) and C (n= 25) from the east London cemetery

Certainly, especially in Group A, there is an obvious confidence in dating cremation burials well into the third and fourth centuries (2d, 3a, 3b, 3c, 4a); it is also possible this may represent a localised continuity of cremation burials. At the same time, it is interesting to note an apparent relative lack of confidence in securely dating burials the first century (1a, 1b), although this again might reflect a local trend; an increase in cremation burials in the second to third centuries is again noticeable (2a, 2b, 2c, 2d), especially in Group A, where the peak appears to be in the late second and third centuries in particular (2c, 2d, 3a, 3b).

Most plots within the same areas have the same general chronological pattern of use throughout the phases; however, as we might expect, there is only a small number of burials securely dated to the first century and London's early development.

The phased plots 21 and 28 and 29 in Group C produce a reasonably 'neat' overlapping of phasing, apparently representing a gradual (and in fact remarkably consistent) shift of focus eastward as plots 20, and 21 went out of use and plots 28 and 29 developed perhaps from the second century (plots 20 and 22 only have one confirmed redeposited cremation burial each).

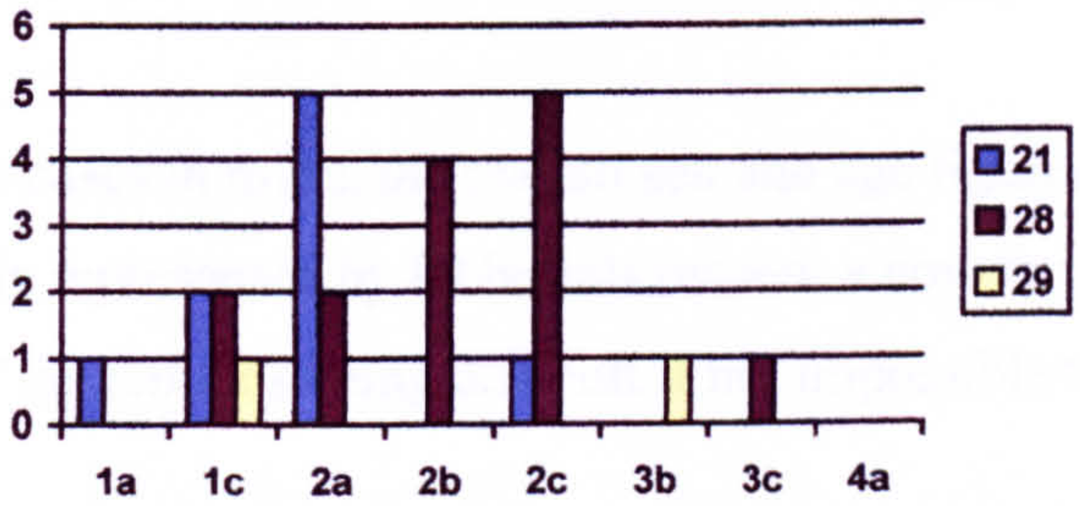

Figure 3.46: phasing of apparent plots 21, 28 and 29 of the east London cemetery (n= 25)

McKinley provides a detailed account of numbers of individuals in each cremation deposit and age and sex categories that incorporate her own complex criteria for 'unurned' burials and 'pyre debris deposits' (2000b, 265–266). Of the 89 cremation burials in original contexts selected for detailed analysis here (appendix 6.2), three burials (179, 399 and 842), all from Group A,[7] seem to have contained the remains of more than one individual within single deposits. Moreover, all of these burials include remains of an infant, as well as a child (burial 179, plot 3), an adult possibly female (burial 842, plot 2), and a perhaps more 'elderly' person of unknown sex (burial 399, plot 2) respectively.

The other apparent 'dual cremation burial' (burial 195, plot 3) reported was thought to have contained remains of an adult male and adult female; however, the cremation deposit in this 'burial' was in fact contained in two separate containers, a jar and a

[7] Unfortunately McKinley's own assessment of the location of such burials (2000b, 272) is very much at odds with her published data here (2000c, Table 138); I have elected to believe the latter.

flask, and indeed it is not at all clear that they necessarily belong the same burial. The photographic evidence is also less than convincing; it may well be that the cut of a second cremation burial pit was missed during excavation in this case (see McKinley 2000b, 272, Fig 100). Unfortunately the deposits from both containers seem to have been mixed post excavation (at least in the way they are reported, see McKinley 2000c, 261, Table 138; perhaps this decision was based on the site interpretation of the deposits being combined in the one cremation burial?); it is therefore impossible to tell which deposit came from which primary container, or whether the remains of the two individuals represented were mixed in both containers or not. This context is considered as probably representing two separate original cremation burials for the rest of this analysis.

Bearing these special cases in mind, the overall sex and age figures for the 93 individuals apparently represented by 89 burials present a now familiar pattern of age, and especially sex of the remains being difficult if not impossible to ascertain in most cases.

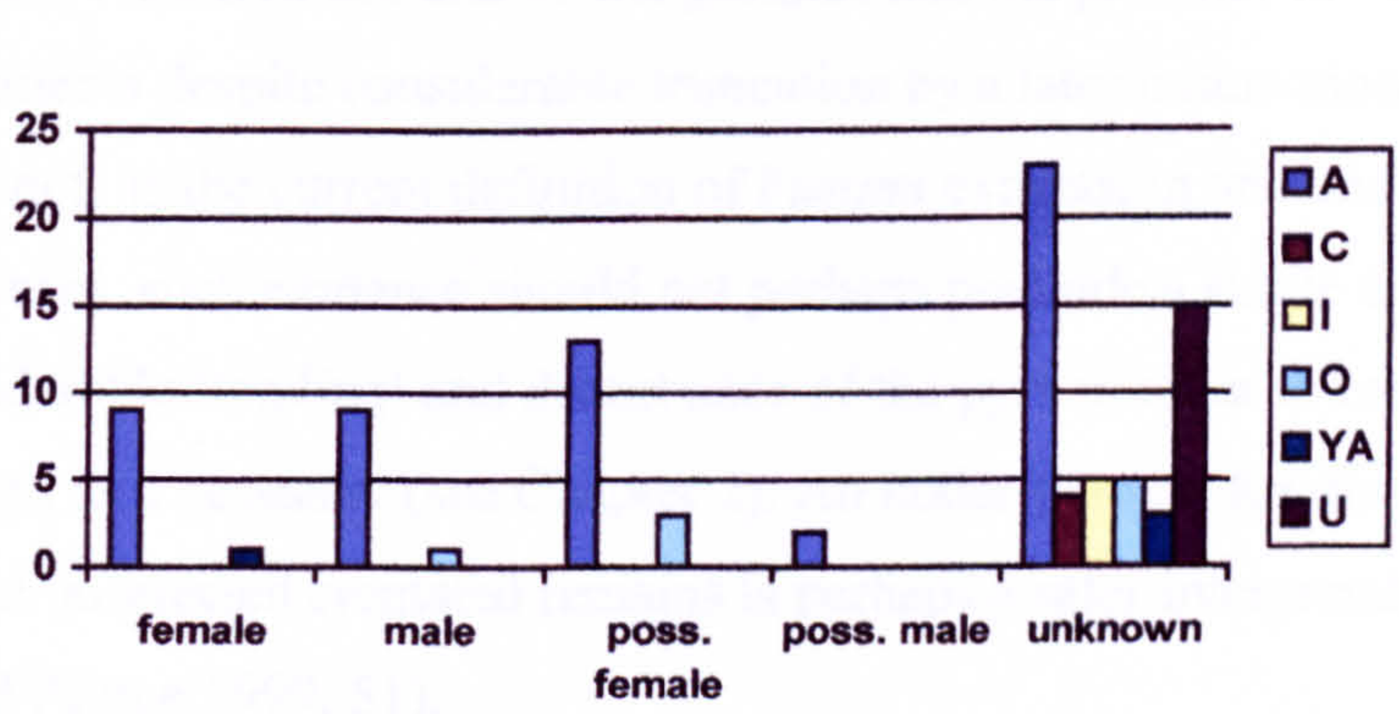

Figure 3.47: comparison of sex and age categories of human remains from east London case studies (n= 93)

As we can see, adults seem to be the majority age group represented (A= 54), followed by those of unknown age (U= 15), older adults (O= 9), infants (I= 5) and young adults (YA= 4) and children (C= 4). The fact that there are equal amounts of positively identified males (10) and females (10), and more possible females (16) than possible males (2) here is much more likely a function of *ad hoc* collection (making the amount of diagnostic fragments present a matter of chance), post-depositional

survival conditions, excavation methods (and criteria used by each individual specialist?) than any matters of selection for cremation and associated deposition. In the main a comparison of plots produces either an even distribution of age and sex categories, or inconclusive results due to low numbers of positive identifications.

Cremation

Pyre site and 'pyre debris deposits'

The remnants of a single probable pyre site (G0.36) was located in plot 3, consisting of a pit (1.80m x 1.00m) 0.68m deep, with evidence of localised burning at one of the upper edges, 'charred lengths of wood', and a lens of pyre material containing 838g of the remains of an older adult (possibly female) (McKinley 2000d, 62–63; see Barber and Bowsher 2000, Fig 54). The feature is interpreted as a probable '*bustum*', although again a lack of evidence for whether or not the entire remains of the cremation are present may suggest alternative interpretations. McKinley is also uncertain for this reason (*ibid*), and on the grounds that the presence of various types of skeletal elements despite considerable truncation by a later inhumation would mean that bone was not, as the current definition of *bustum* expects, in anatomically correct position. However, such evidence should not perhaps preclude a single cremation event, if considerable 'tending' and disturbance of the pyre in order to cremate the dead is accepted as a necessity (see Chapter 2). An under-pyre pit for draught as well as collection of unselected cremated remains is perhaps a safer interpretation (see Chapter 1, and Pearce 1999, 51).

Unfortunately, there is no specific comparison of components diagnostic of pyre methods etc of the cremated bone from this unique feature on the site with the bone from the various other contexts from which such material was derived ('urned' or 'unurned' burials or 'pyre debris deposits', see below). Nor are any environmental samples in the archive or published which may have more firmly cemented the link between cremation practice and pot, glass or especially certain plant materials found in other pyre related deposits. Evidence for two 'pyre goods' was recovered:

fragments of a glass 'mercury flask' [154], and a small turned wooden box [173]. But their location within the feature was either not recorded or simply not published.

Of further interest are sixteen contexts in plots 2, 21 and 28, identified as containing 'pyre debris deposits' and containing a 'mix of burnt material including charcoal, cremated bone, charred seeds, fuel ash slag [resulting from construction of pyres over highly siliceous soil] and various burnt and unburnt artefacts' (McKinley 2000d, 63). The deposits of plot 2 comprised only a 'small layer' and some samples from the backfills of inhumation B573, B575 and B578 (*ibid*), and it is clear that the vast majority of these deposits come from the large spreads of material as well as smaller features in Group C, and particularly in apparently consecutive plots 21 and 28 (see McKinley 2000d, Fig 20). The largest deposit here (D7.3) was found to contain just over 26kg of cremated bone representing the remains of a minimum of 19 individuals of various ages and sexes. Small amounts of charred, incompletely oxidised human soft tissue residues were also recovered from such deposits (McKinley 2000b, 269). McKinley has analysed the diagnostic qualities of the bone in these 'pyre debris deposits' in comparison with bone from other contexts (see below).

Charred seeds of grassland plants and especially stem fragments located through environmental sampling of these deposits (as well as some contexts considered in the original report to be burials, but here isolated as possible further deposits of pyre material, or specialist burials, see below) have led the excavators to speculate that grasses or hay were used as kindling (Barber and Bowsher 2000, 70, see also Davis and de Moulins 2000, Tables 145, 146 and 147 for charred plant remains from these contexts); the charcoal samples from pyre material had apparently been mislaid at the time of writing the report, so no analyses of the types of wood used in pyre construction could be carried out (*ibid*).

Environmental sampling of 'pyre debris deposits' (along with the separate class of pyre related features and 'unurned burials') also produced tantalizing evidence of the use of other plant materials, probably as pyre offerings, during cremation (Barber and Bowsher 2000, 69–71). In particular, it would appear that originally raw and dried lentils, peas and celtic beans were present in significant numbers in 'pyre debris deposits' (as well as 'urned' and 'unurned' cremation burials; the apparently more

frequent association of such material with carbon rich deposits and other 'debris' may be significant in determining the true functions of these features).

These materials apparently survived the cremation through only being subjected to relatively low heat (approximately 300–350°C), and probably represent only a proportion of the original number used; it is further suggested therefore that only those near the edge of the pyre or which fell to become enveloped in cooler material at the base of the structure have survived (*ibid*, 70–71). The report proposes that these findings are perhaps consistent with either a general scattering of the pulses into the pyre during cremation 'akin to throwing rice at a wedding', or placing of them at the pyre's edge (*ibid*, 71).

A certain amount of evidence for the use of 'pyre goods' was found in the 'pyre debris deposits' (see Wardle *et al* 2000, 250–253), including various fragments of bone objects (a comb, dice, counter, needle and a rivet), glass objects (including fragments of a conical bodied phial, and a beaker; evidence of two further burnt phials were residual in other contexts) and copper alloy mounts decorated in the form of a lion mask that may have come from a casket or caskets (another such object was unstratified). Moreover, 'hundreds' of hobnails were recovered from the deposits, and although the difficulty of interpreting whether or not these have been burned is again expressed here (Barber and Bowsher 2000, 67), it might be inferred from the context that these are the remnants of footwear placed on or near the pyre on numerous occasions.

The pottery recovered from this pyre material is apparently of 'early date, *c* 70–120' (*ibid*), but the report only seems to recognise the significance of this in terms of vessel types as compared with other London sites. While recognising the potential of such comparison in terms of a contextual study (Pearce 1999), surely such a narrow date range of pottery might also provide a prospective date at least for the apparent 'dumping' (and perhaps contamination) of this material? If so, the location of the contexts in plots 21 and 28 becomes even more interesting (with the caveat that irregular survival/recognition of such deposits on individual sites might be a factor, as Barber and Bowsher suggest, *ibid*, 61). It might be suggested that the deposits are connected in some way with the shift of cremation burials eastwards in this area in the

second century (see Figure 3.22). A moving of pyre sites elsewhere as burial increased in the area, as opposed to mass clearance of such features in a single event, is perhaps the more likely explanation.

The writers do note that '(T)he number of amphorae, drinking vessels and beakers seems to suggest plenty of drinking going on at the site, but the low amounts of samian ware and dishes imply that there was relatively little eating' (*ibid*, 67–8); again however it is important to suggest from the evidence that this apparent propensity for drinking might be linked with cremation activity, in the same way that interpretations for specialist use of lentils and celtic beans in the ceremony are suggested by association (see above). It is also worth noting that samian ware is entirely absent from the cremation burials on this site, suggesting that this type of material formed little or no depositional part of mortuary ritual here unlike elsewhere.

'Undefined burials'

A total of 35 features identified in the MoLAS report as 'unurned burials' are considered here to fall into a special category (appendix 6.0) on the basis of their specialised contents. These features are here once again referred to as 'undefined burials', recognising their ambiguous status as either small 'pyre debris deposits' or specialised cremation burials apparently containing unsorted cremated bone and pyre material ('Brandschuttgräber'). The diagnostic qualities of cremated bone from these features are considered in comparison with material from other contexts below.

The features are absent (but may well not have been recognised or recorded in detail or thought significant) from the West Tenter Street site (Group B), but are reasonably evenly dispersed between Group A (ten in plot 2 and four in plot 3) and Group B (two in plot 21 and nineteen in plot 28).

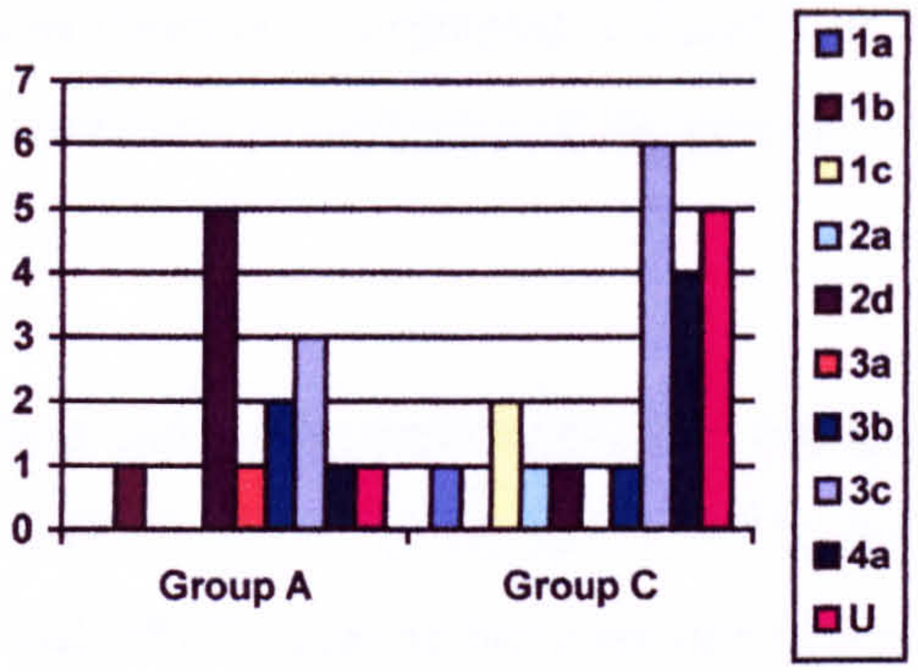

Figure 3.48: phasing and location of 'undefined burials' from east London case studies (U = unknown; n= 35)

The higher numbers in plot 28 are perhaps in keeping with the higher frequency of larger 'pyre debris deposits' and perhaps greater disturbance of pyre material in this more easterly and later area (see above). [8] Many of the 'undefined burials' in Group C are dated to the late third and early fourth centuries (3b, 3c, 4a), suggesting that they might represent either later redeposition disturbed pyre material, or a specialised late form of cremation burial. On the other hand, a number of these features are dated throughout the sequence (see particularly the five burials of phase 2d in plot 2), and are perhaps more likely to be contemporary with more securely defined cremation burials (see below).

It has to be said however that such features in plots 21 and 28 seem to cluster among inhumations (B754, B755, B756, B757 and B758) or next to 'pyre debris deposits' (burials B761 and B787) or both (B779, B780, B781, B782, B783, B784, B788, B789, B790 and B791) suggesting that many of the 'undefined burials' are simply the result of later disturbance of 'pyre debris deposits' (see Barber and Bowsher 2000, 40, Fig 38; 42–43, Fig 39).

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It is unclear from the report if the 'undefined burials' that are dated are dated by pottery assemblage or stratification or both; a date based on included potsherds may be significant in that the sherds derived from larger 'pyre debris deposits' of plots 21 and 28 were comparatively early. This information might help to determine whether

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[8] Detailed spatial analysis of the relationship between these features, spreads and other large deposits of pyre material, and cremation burials with sorted cremated bone might best await the development of a GIS of some sort; see Chapter 12.

the features currently under discussion represent isolated burning events, or redeposited material derived from disturbance of the earlier, larger 'pyre debris deposits'.

33 of the 35 features falling into the 'undefined burials' category (B210, B215, B220, B508, B581, B598, B754, B755, B757, B758, B767, B772, B779–784, B786–791, B794, B832–837, B841 and B848) seem to have contained a mix of carbon, nails and/or potsherds probably comprising pyre material. Of these, some (B210, B215, B220, B508, B758, B789, B848) are not recorded as having any bone at all in McKinley's dataset, while all the others are considered possible pyre deposits except B779, which is apparently thought to be an 'urned' burial on the basis of sherds representing 10% of a jar being present (McKinley 2000c, Table 138; cf. Wardle *et al* 2000, 238).

The majority of the 35 'undefined burials' (17) are recorded as including less than 250g of human bone, though some had between 250g and 500g (B754, B779, B784 and B836), and some had between 500g and 1000g (B755 and B761) and even over 1000g (B783 and B837). These figures depend a great deal on relative survival of evidence and the size of the sample taken, and should not be simply taken as indicative of a context representing a 'burial or not'.

The two 'burials' (B756 and B761) not recorded as associated with carbon etc are both from plot 28, and were the only ones in the report that were thought to securely contain 'footwear', in a 'scatter' in each case (see Barber and Bowsher 2000, Table 132),[9] although it is clear that B756 either contained very little if any bone (was this a 'burial' at all?), and that B761 was mixed with a number of 'pyre goods', including (along with hobnails that might be burnt or unburnt) a fragment of bone hairpin, fragment of bone inlay (from a burned bier? See Cool 2004a), evidence of three copper alloy ring fittings (Wardle *et al* 2000, 248). Nails were also present in these features.

[9] 'B756' seems to have been mistakenly recorded as 'B765' in this table, but the catalogue (p231) is quite clear.

Several other such features (all from plot 28) are recorded as containing hobnails (B786, B754, B755 and B758) and it is apparently from this class of 'unurned' burials (as well as others of the same class considered here too damaged or incomplete for analysis) from which the figure given in the published report of hobnails occurring in no less than 32 distinct cremation burials is derived (Barber and Bowsher 2000, 68, Table 22, although cf. Table 138); certainly no 'footwear' is recorded as being intact when deposited, and no cremation burials of the 89 considered below contained hobnails. Hobnails were apparently found in numbers in the larger 'pyre debris deposits' of plots 21 and 28, and we might suggest that it is the pyre stage of the ritual sequence to which such objects probably belong across the entire cemetery area.

Similarly, the numbers of burnt copper alloy objects (18) and burnt glass fragments (13) in reported in Table 22 with no reference to particular burials (Barber and Bowsher 2000, 68) and not detailed in the catalogue (Wardle *et al* 2000), and these may either have been found within 'undefined burials' currently under examination, or else among the more securely identifiable cremation burials considered below.

Second and third century 'undefined burials' from plot 2 in Group A also contained burnt sheep or sheep sized bones (B833, B834, B837 and B841), while some burnt chicken bones were recovered from B835 (also plot 2) and B779 in plot 28 (*ibid*, 74, Table 29).

Perhaps more significantly, B581 (plot 2, phase 4a), B761 (phase 3c, plot 28) and B788 (plot 28, unknown date) all apparently included large proportions of possibly 'prepared' (no head or phalanges) chicken skeletons (several of the more definite cremation burials also had this or like components, see below). Burnt goose, duck, pig and whiting bones were also retrieved from B581, and burnt plaice/flounder bones from B761; this may be significant if unburnt fish bones from B779, B833, B837 and B848 are considered diagnostic of feature type (*ibid*).

B581 was also found to contain a burnt fragment of a bone hairpin and burnt and severely warped remnants of four Black Burnished Ware vessels, including two dishes, a bowl and a jar. B842 of plot 3 was the only other such feature to contain more significant parts (35%)of a vessel, this being of a specialised form, a tazza, as

well as being recorded as asymmetrical (warped by the pyre?). Finally in this area, B791 in plot 28 contained a burnt fragment of bone inlay similar to that found in B761 in the same plot. The majority then (and possibly all) of the finds associated with these features seem to show evidence of having been in contact with the pyre, and most are directly comparable with objects recovered from 'pyre debris deposits'.

Another aspect that several of these features share with the latter is the inclusion of considerable amounts of charred plant remains. In plot 2, for example, samples from B833, B835 and B837 were found to have particularly large numbers of charred cereal grains and stems, and the latter had an especially large number (31) of peas (see Davis and de Moulins 2000, Table 146; the sample from B846 also had 1 pea, but as this 'unurned' burial was not recorded as having any carbon content, and additionally contained a coin, it has been considered a possible loose or bagged cremation burial of mostly sorted bone, see below). In plot 28, considerable amounts of charred cereal are especially noticeable in samples from B758, B755, B788 and B779, and numbers of lentils and/or peas were found in B772 (plot 21), B758, B761 and B755 (ibid, Table 150).

Such inclusions have already been convincingly associated with cremation methods and pyre offerings through analysis of 'pyre debris deposits' of both plots 2 and 28, and seem to suggest either deposition or redeposition of unsorted pyre material including cremated human bone here also, especially as the apparently sorted cremated bone deposits of the 'urned' burials analysed on the whole contain less charred cereal and lentils or peas (cf. Davis and de Moulins 2000, Table 149; see below).

On the basis of corroborative evidence, B581 (plot 2, phase 4a, adult sex unknown) and B761 (plot 28, phase 3c, older adult sex unknown), considering the number and variety of 'pyre goods' present, might be worth singling out; these burials also, along with B788 (plot 28, unknown phase, young/mature adult sex unknown) contained whole or partial burnt chicken skeletons as well as other burnt animal remains). The same might apply to B837 (plot 2, phase 2d, adult possibly male), B755 (plot 28, phase 3c, adult sex unknown), and B783 (plot 28, phase 3c, adult possibly female), if we take into account the sheer amount of bone in these burials (apparently

representing a single individual in each case). Of this group of 'undefined burials', these then seem the best candidates for being loose or bagged 'Brandschuttgräber' of some variety, although they could also be special, or even simply examples of 'burial like' redeposited pyre material.

Cremation burials

Turning now to a consideration of possible evidence of pyre and collection from the more definite cremation burials, it would appear that nails mixed with bone in burial 796 were not burnt, and therefore might denote the existence of a wooden secondary container, cover, or marker. Samples from 'urned burials' deemed to be from original contexts in plot 21 (768, 771, 774, 775, 776 and 778) and plot 28 (795), as well as redeposited 'urned burials' of plot 28 (816, 817 and 818) contained some charred cereal remains perhaps associated with pyre kindling (although few in comparison with several of the 'undefined burials' already discussed).

As has been noted, numbers of individuals in each deposit are generally restricted to 'at least 1', suggesting singular pyres (or remarkably effective pyre clearance in each case); all of the three cremation burials from secure contexts where more than one individual is recorded, (399 and 842, plot 2; 179, plot 3; also one of the two redeposited burials where this was the case, 817, plot 28) were thought to have been infant and adult combinations, where combined cremations may perhaps especially reflect life connections between the deceased.

Alternatively, the majority of these burials including infants might suggest the use of pyres to cremate those for whom they were planned at the same time *and on the same pyre as* some for whom the expense of time and energy on pyre building and cremation was perhaps considered inappropriate. Revisiting and adding of further cremated bone to existing burials or retention of remains unburied until further cremated bone was added should not be ruled out, and might even provide some explanation for the redeposited burials involved...

As McKinley points out, a variability in bone fragment sizes between deposits in apparently undisturbed ceramic containers, disturbed ceramic containers, loose or

bagged burials or various 'pyre debris deposits' is probably more a function of post-depositional processes and survival conditions than matters of bone selection for different forms of deposition (2000b, 270–271). No data from fragment sizes in each burial are published; nonetheless, fragmentation in the least disturbed deposits seems to be in keeping with considerable fragmentation of bone at the time of deposition (see McKinley 2000b, 271, Table 72), probably resulting from pyre maintenance and collection methods.

The proportions of various bone colours in different types of deposit may give clues as to overall cremation and collection methods. McKinley notes some variation from the fully mineralised off-white colouring in approximately 65% of bone from 'pyre debris deposits', 100% of 'lidded urned' burials, 66% of other 'urned burials' and 50% of the 'unurned burials or pyre debris contexts' (McKinley 2000d, 66), the latter being equivalent with my 'undefined burial' group discussed above. The specialist seems to link this with a perceived overall pattern of the 'efficiency of cremation' of cremated bone from Romano-British contexts being 'consistently poorer' than that of other periods (*ibid*). A comparison with other profiles then would suggest that the cremation method represented by the London dataset is one that generally produced cremated bone of more diverse levels of oxidation and mineralisation, or less 'efficiency'.

Diversity of deposits from the same sites should also be taken into account however, as should the exact percentage of bone in each deposit deemed 'enough' to argue for 'poor efficiency'. In fact McKinley's more detailed statistics (2000b, 269) seem to show that the finding of an overall lack of efficiency is somewhat of a generalisation, given there were only eight 'lidded urned burials' in total, and that 'urned' and 'unurned' burials showed variation in only about 66% and 50% of cases.

Moreover, in most of the burials with some colour variation (32= 48%) only 1–3 bones were affected, with a pattern of less and less burials as proportions of bone affected increased (36% with 4–10 bones, 11% with 10–20 bones/bone groups and 3% with 24–25 bone/bone groups). Exactly how these groups correlate with context types is not reported.

More interestingly, McKinley records that '(E)xtensive poor oxidation of the bone was noted in 11 burials' (*ibid*); while not giving any indication as to exactly which burials these were (apparently an interesting minority), McKinley does point out that these burials were among those with ceramic primary containers (in original context and redeposited), and that no patterns of age, sex, phase or location were apparent (*ibid*). These constitute a small proportion of the burials with ceramic primary containers, and might perhaps be interpreted as cremations where adverse conditions of some sort made the work of cremation and collection even more difficult. This, along with sorting and collection methods may also account for the two 'urned burials' (773 [plot 21] and 815[plot unknown, not included in detailed analysis]) found to contain small amounts charred, incompletely burnt soft tissue residues (*ibid*) similar to those found in 'pyre debris deposits'.

Given the difficulties inherent in pyre cremation, this in itself would appear to constitute a high efficiency rate, with only a small percentage of bone not fully burnt in most cases (collection methods may also be a factor). Indeed, as McKinley states '...the vast majority of the bone was the buff-white colour, indicative of complete combustion' (*ibid*).

A number of burials (from unspecified contexts or plots) contained burnt copper alloy and/or glass fragments (Barber and Bowsher 2000, 68, Table 22), which might attest to some fragmentation on the pyre or during collection, although post-depositional processes and/or excavation conditions may have been a factor. Ten of the thirteen catalogued objects that qualify as possible 'pyre goods' were located in undisturbed primary containers in plot 3 (burials 173 and 231) and plot 28 (burials 752, 753, 760, 762 and 763). All of these objects are fragmented, perhaps providing further evidence of rigorous pyre maintenance and collection methods, as well as high temperatures. (This figure does not include animal bone, which might more obviously have been already modified through preparation, cooking and/or eating).

In terms of pyre goods (appendix 6.3), detailed figures of all burials containing burnt and unburnt animal bone are not available, and specialist analysis seems to be limited to 'notable examples', combined with generalisations (Barber and Bowsher 2000, 71–

76). The occurrence small amounts of burnt animal bones in cremation burials are only reported in a generalised and statistical manner (*ibid*, 73), making identification of prospective patterning of such burials, and cross referencing with the occurrence of other burial components impossible in this study. Pig and chicken seem to be the main animals associated with the pyre, if the occurrence of small numbers of their bones in 'urned burials' is taken as a result of chance collection along with human bones; pig bones were apparently found in a maximum of 26 of the burials, chicken bones in 17, and of these both pig and chicken bones were found in 9 (*ibid*, Table 26b; no details of plot, phase or burial number given).

On the other hand, those burials considered 'notable' for the number and variability of burnt animal bones present are reported in more detail, and these seem to include a number of features classed as 'undefined' (and more likely pyre related) above (*ibid*, 74, Table 29). Perhaps more interestingly, several burials are recorded as containing either whole skeletons or whole parts ('joints'?) of burnt animals (*ibid*, Table 27); this affected 11 of the 89 cremation burials selected for detailed analysis here (this was also seen in 'undefined burials' B581, B761 and B788). Chicken skeletons are the most common in this category (as in the 'undefined burials' thought to be possible 'Brandschuttgräber' on these grounds: B581, B761 and B788), being present in five burials from all general spatial groups (Group A: burials 839 and 840 [plot 2]; Group B: burial 696 [plot 17] and 1092 [plot 17]; Group C: burial 752 [plot 28].

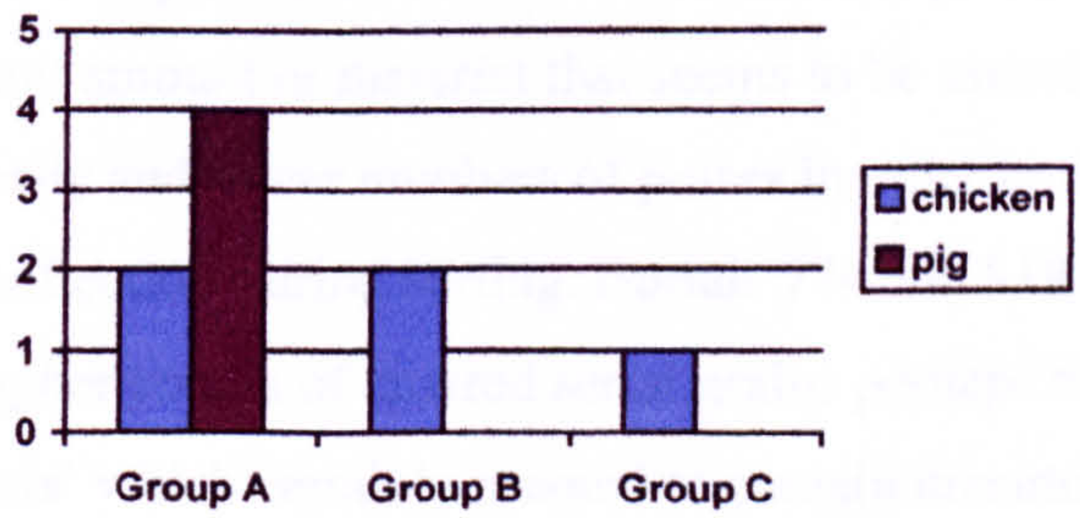

Figure 3.49: types of burnt animal skeletons and articulating parts in Groups A, B and C from the east London case studies

An absence of head or phalanges again suggests 'culinary' preparation of the birds at some point. Group A appears to be more diverse in this respect, with burial 5 (plot 1,

phase 3b, young adult female) containing burnt remains of a large part of a pig skeleton, and burials 413 and 333 (plot 2) and 187 (plot 3) contained articulating forelegs of pig (*ibid*). All chicken used were apparently mature, but an unspecified number of the pigs in this category were apparently 'at least immature, at most mature, with exceptions including two juveniles and one possible neonate (all in the forelimb collection)' (Barber and Bowsher 2000, 74). No details of exactly which burials these came from are given.

The presence of the whole burnt skeleton or articulating bones of part of the burnt animal skeleton might suggest that less sorted components of pyre material were placed in cremation burials ('Brandschuttgräber'?); alternatively, this may be evidence of separate placement of the cooked or burnt animal parts rather than chance collection from the pyre, either at the same time as deposition of the human remains, or perhaps after initial deposition (see below). The deposits concerned all appear to be second or third century in date, and do not appear to be associated with any particular sex or age group.

As already noted, charred plant remains were recorded for a number of 'urned' burials in plots 21 and 28 (apparently the only plots where sampling was carried out on such deposits). In plot 21, lentils were evident in burials 768 and 771 (one in each) and two peas were found in burial 774; lentils were also found mixed with bone deposits in redeposited 'urned burials' of plot 28 (817 with seven and 818 with two). Burial 817 (and perhaps 774 with two peas?) is therefore the most conspicuous in this respect, containing a significant amount of material that seems to be associated with pyre material, while the rarity and lower numbers of pulses in other burials can perhaps be put down to chance collection during sorting. Burials 774 and 818 are also notable for containing slightly higher counts of charred serial grains perhaps more in keeping with 'undefined burials' which certainly seemed to contain unsorted pyre material; whether they are therefore also possible 'Brandschuttgräber' is impossible to tell without further evidence being available.

McKinley has identified 'spot staining' on bone that possibly results from proximity of metallic 'pyre goods' during cremation in nineteen cremation-related contexts (apparently recorded as 23 burials in Table 22, Barber and Bowsher 2000, 68),

including thirteen urned burials and two pyre debris deposits…' and notes the skeletal position of staining in several cases (McKinley 2000b, 273; no individual burial or context numbers given). Totals of eighteen and thirteen cremation burials are also reported as containing burnt copper alloy and glass fragments respectively (Barber and Bowsher 2000, 68, Table 22), but these are not detailed elsewhere and no burial or plot numbers given. Thirteen other objects that apparently survived the pyre, collection and sorting along with human remains *are* reported from cremation burials in Groups A and C, (none from Group B, but this may reflect the relatively low number of burials, as well as particular circumstances of recording and analysis).

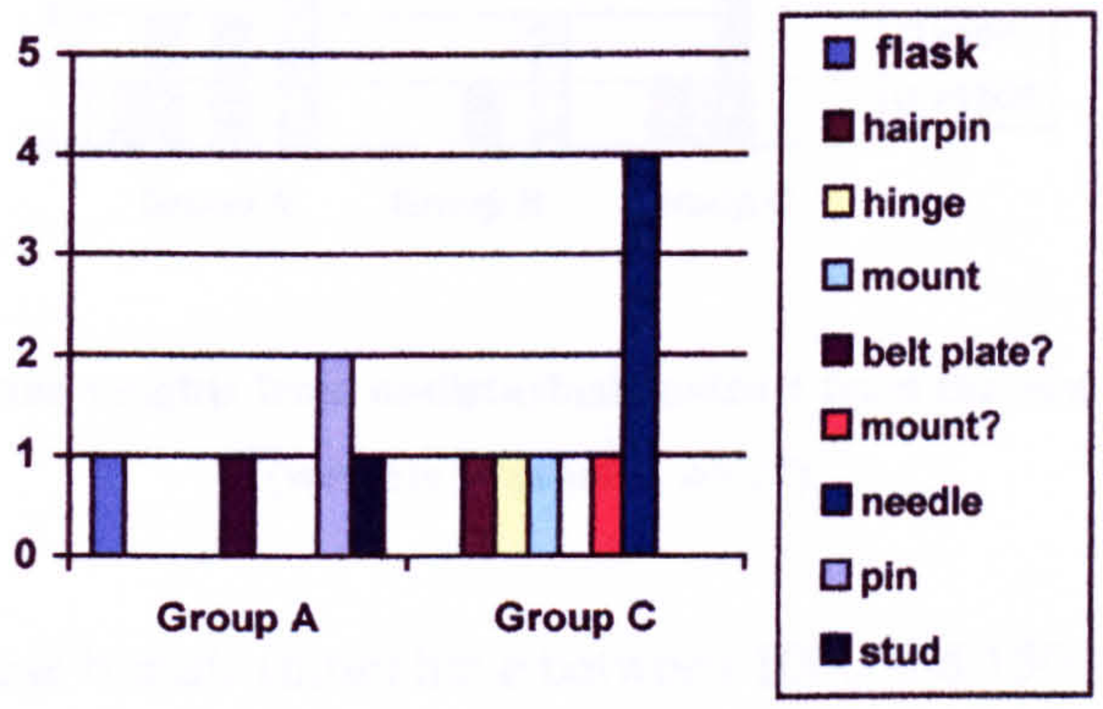

Figure 3.50: catalogued types of 'pyre goods' from the east London case studies

The assemblage reported in the catalogue is notable for containing mainly bone objects. Among the objects made from this material, burial 399 in plot 2 and burial 231 in plot 3 contained pins, while burial 343 in plot 2 contained the remains of a 'mount' or belt plate. In plot 28 burials 760 and 762 contained parts of a hinge terminal and 'mount' respectively (bier fragments?), while burial 753 contained the point of a needle and burial 763 held fragments of a hairpin and (apparently) no less than three needles. The types of objects present suggest that clothing and perhaps other personal items were placed on the pyre with the deceased in these cases.

The only other possible pyre goods reported with this state of preservation were from burial 173 in plot 3, comprising a copper alloy stud which perhaps suggests burning or destruction of a casket (although it is unclear whether or not this is burnt, and this object may have belonged to a cover of some sort, it is also worth noting that copper alloy mounts were also found among 'pyre debris deposits') and a burnt glass

'mercury flask', of the same type as that found in the deposits associated with the pyre site (G0.36) also located in plot 3.

Bone weights (appendix 6.2) from the relatively few (27) cremation burial contexts described as 'undisturbed' (and where bone quantity information is recorded, 7 remain 'unknown') present a quite varied picture both between and within Groups A, B and C. [10]

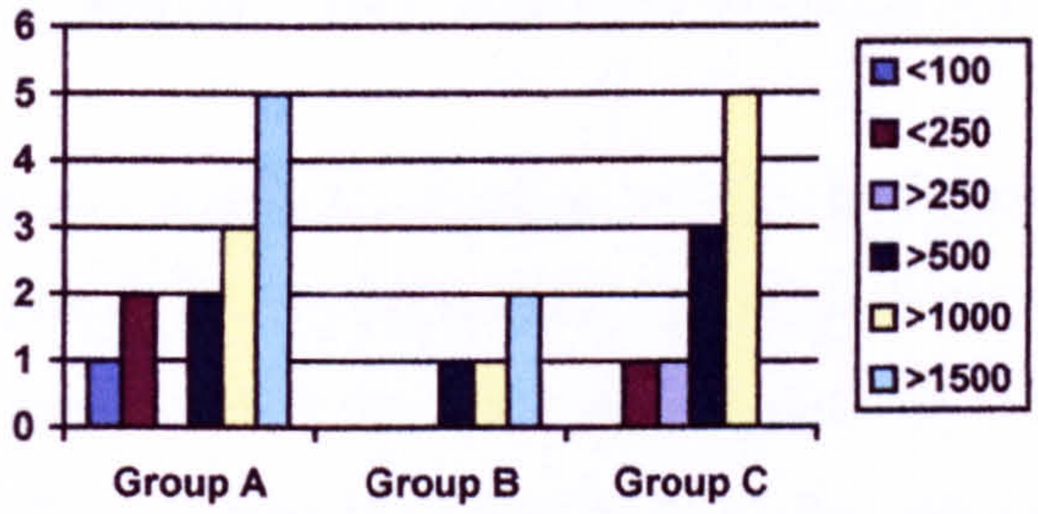

Figure 3.51: diverse bone weights from undisturbed contexts from the east London case studies (weights in grams.; n= 27)

Overall, a third of these burials (nine) have between 1000 and 1500g of bone (297, 839, 840, 255, 752, 753, 760, 763 and 766). A further seven burials (290, 325, 177, 195 [although it should be remembered that this context probably represents two burials], 251, 675 and 696). It may be significant that the latter are restricted to Groups A and B. These weights are still nearer the lower end of the range that we might expect from the entire bone of an adult cremation (McKinley 2000b, 269), and this leaves the largest group of these apparently undisturbed burials (11) with considerably less bone than we might expect (burials 179,180, 231, 563, 762, 773, 776, 785, 792, 838 and 1002). The evidence suggests that token amounts of less than 500g of bone are likely to have been collected in most cases, and in some cases very small amounts.

In the cases of burials 563 (7g, plot 2) and 792 (324g, plot 28) this may be connected with the fact that they appear to have been loose/bagged burials, the least protected category in terms of post-depositional processes and excavation, while the beaker

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[10] Maximum bone weight in the text of 1948.2g (McKinley 2000b, 269) unfortunately does not appear to concord with weights of over 2000g for burials 349 and 696 [134] in McKinley's dataset (McKinley 2000c, 361, Table 138). These weights are included in the '>1500g' category as a control.

selected as the primary container for burial 179 (100g, plot 3) may have restricted its contents. This could be evidence that the amount of bone available to the depositors denoted the primary container size to be selected, that primary container size was already a factor in limited bone collection at the pyre stage, or that cremated bone was discarded after the vessel was selected in this particular case. The fact that this was one of the 'double burials', and that it represented the remains of a child and an infant is particularly interesting; were primary container size and cremated bone weights restricted in this case in relation to the types of individuals cremated?

However, even though the cremated bone from another of the 'double burials' of Group A (burial 842, plot 3) was also contained in a beaker (the only other case of this form of primary container from the site), this amounted to a significantly higher 633g, despite being partly disturbed. Perhaps the type of primary container is linked in both these cases with the age of at least one of the deceased; the only other securely identified deposit of this type was in a jar in plot 2 (burial 399).

McKinley reports a general picture of all skeletal elements being present in most burials, regardless of relative bone weights, with considerably wide ranges in terms of the various elements present between burials (McKinley 2000b, 271), and concludes that 'relative percentages from the undisturbed burials did not suggest any deliberate selection of skeletal elements for burial' (*ibid*, 272). Disturbance of other burials makes them insecure contexts for such analyses.

Bone deposits containing the remains of more than one individual might suggest 'dual' cremations and 'wholesale' collection methods in each case, but alternative reasons for mixing can also be suggested. The majority of burnt animal bones appear to have been 'accidentally' mixed with human remains in whatever collection method was employed (as do possible remnants of metal objects) perhaps through some form of flotation or gravitational method. This could also account for the presence of complete or partial animal skeletons in a number of burials if bone for sorting was selected from part of the pyre where such items had been placed or had fallen; alternatively, some form of separate deposition might be suspected in these cases. The presence of charred plant remains in generally lesser numbers in the probably sorted bone deposits sampled than were found in the probably unsorted deposits of

'undefined burials' again suggests some form of 'wholesale' collection and sorting method, after which relatively small amounts of such material remained mixed with the bone to be deposited.

Deposition

Cremated bone deposits

As noted above. a number of 'undefined burials', but perhaps especially B581 and B761 suggest themselves as possible 'Brandschuttgräber', and more particularly 'Brandgrubengräber' (where deposited burnt human bone and pyre material are *unsorted and mixed*). This category more obviously applies to two very interesting burials in plot 2, which seemed to contain probably unsorted pyre material (a mix of cremated bone with carbon and burnt brickearth, either loose or bagged) in rectangular cists made by lining pits (1.26m and 1.10m in extent respectively) with tiles and mortar (see Barber and Bowsher 2000, 106, Fig 73); the excavators also suggest the possibility of a wooden component revetting the inner surfaces from the fact that mortar was flattened; the burials were adjacent and unparalleled elsewhere in the cemetery (*ibid*). A further 87 burials were considered to be of sorted cremated bone.

The position of cremated bone in the pit appears to be closely related to the pit design in association with numbers of accessory vessels and other accessories on this site, both of which seem to be extraordinarily limited (see below). Truncation is also a significant factor: in 40 of the 89 more definite cremation burials the position of the bone in relation of the pit could not be clearly determined. However, in all of the remaining 49 burials the bone can be described as centrally or approximately centrally placed.

Pit design

The majority of pits seem to have been cut to a size that would adequately contain the limited number of items (in most cases the primary container only) characteristic of most burials in all plots on the site (although this may to an extent result from

truncation of features, expectations of excavators and difficult excavation conditions in some cases). In 16 burials the extent of the pit could not be reconstructed, but of the remaining 73 burials, 30 were 0.50m across or less, and a further 18 were between 0.50m and 0.75m. Amphora burials, as well as burials with other secondary containers, dominate the remaining 25 burials with pits above 0.75m.

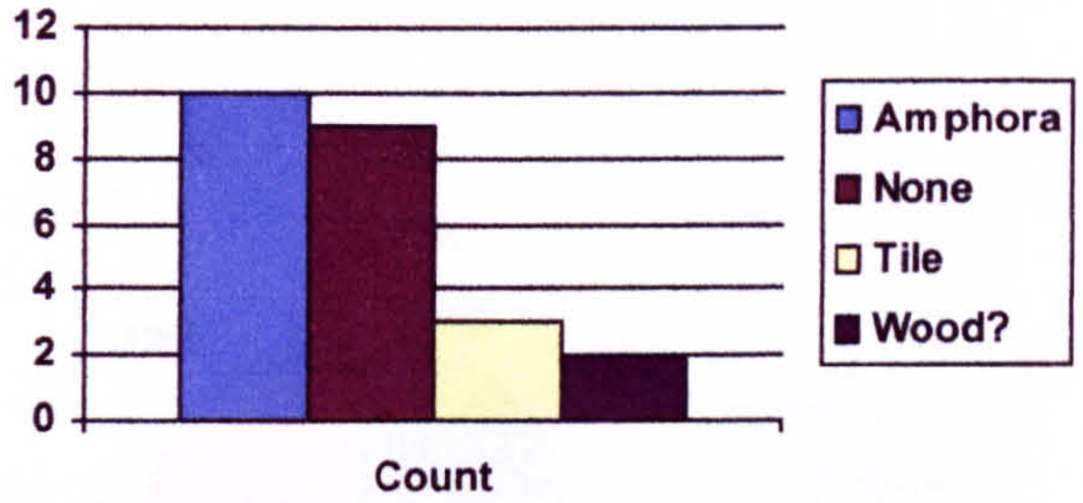


Figure 3.52: secondary containers in pits more than 0.75m in extent from the east London case studies

In fact, a number of amphora burials from the site as a whole, including the two secure burials with this form of secondary container from plot 28 (785 and 753; see Barber and Bowsher 2000, 107, Figs 74 and 75), as well as others (sufficiently undisturbed) from plots 2 (burials 325, 349, 368 and 838) and 3 (175 and 231), have noticeably large pits with considerable space for their contents. Only one such burial (burial 417, plot 2; disturbed) was less than 0.75m (see Wardle *et al* 2000).

Amphora burials 349 and 368 from plot 2 had additional pit qualities in the shape of post-pipes and tiled post settings respectively at the corners of the pits (*ibid*). The size and design of pits for burials with other types of secondary container are less certain, although possible 'Brandgrubengräber' from plot 2 (burials 567 and 568) do seem to have been designed specifically as tile and mortar cists in each case.

Primary containers

Of the 90 primary containers (appendix 6.2; 6.4) from secure and original contexts (jar and flask in 'dual burial' 195 are counted as two burials), ceramic containers (70) and especially jar forms (65) dominate, indicating a very strong tradition across the

whole site; a total of 20 loose/bagged burials make up a significant minority, however. Beakers were used in two burials in plot 3 (burials 179 and 842) these being two of the three 'double burials' of Group A. The other exceptional cases were flagons in burials 268 and 988 in plots 3 and 17 respectively, and a flask in one of the two burials probably represented by 'burial' 195 in plot 3 (19 of the 20 redeposited burials were also deposited in jars, the only exception in this case being another flask in burial 323).

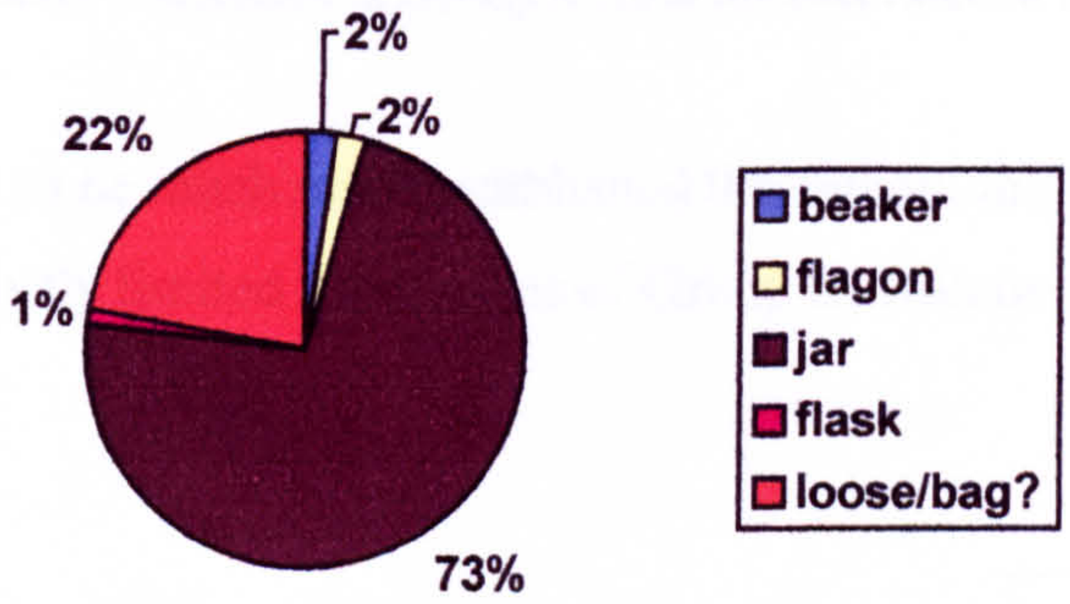


Figure 3.53: primary container selection in cremation burials in original contexts from the east London case studies (n= 90)

An overall pattern of increasing use of jars as primary containers (i.e. of the tradition flourishing) as overall numbers of burials increase in the second and third centuries would seem to be apparent in Groups A, B and C (cf. Figures 3.54 and 3.55), but there is also some interesting variability between the three groups.

In Group A (with a total of 51 primary containers, including those of 'double burial' 195), the first century seems to be characterised by some diversity in primary container types among the relatively lower numbers of burials at this early stage, before the increasing use of the jar in line with increasing overall numbers of burials the second century. It is mainly in this group that an underlying tradition of loose/bagged burials of apparently sorted cremated bone (16 out of 20 burials of this type) seems to continue. Although matters of original excavation and interpretation should as always be considered, the numbers are quite convincing here.

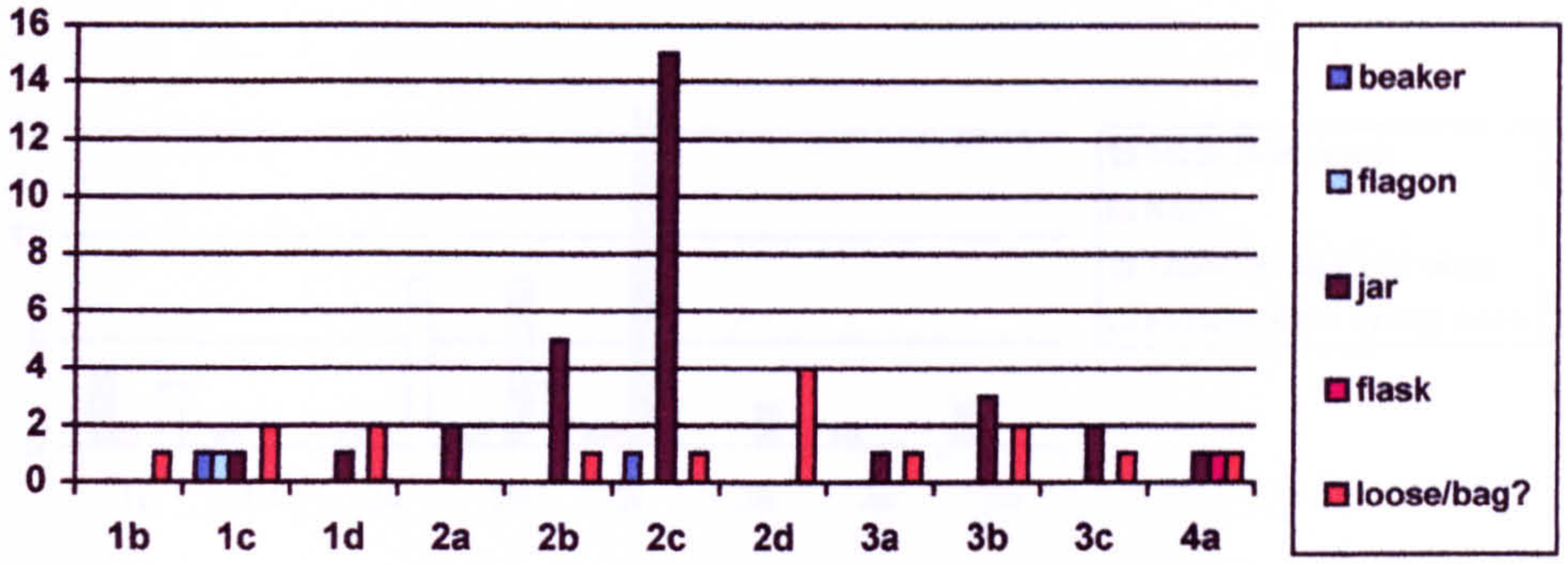


Figure 3.54: phased primary containers in Group A from the east London case studies (n= 51)

The jar tradition seems to be much more established throughout the phases of Group C, and within the relatively limited date ranges of Group B, with only occasional deviations.

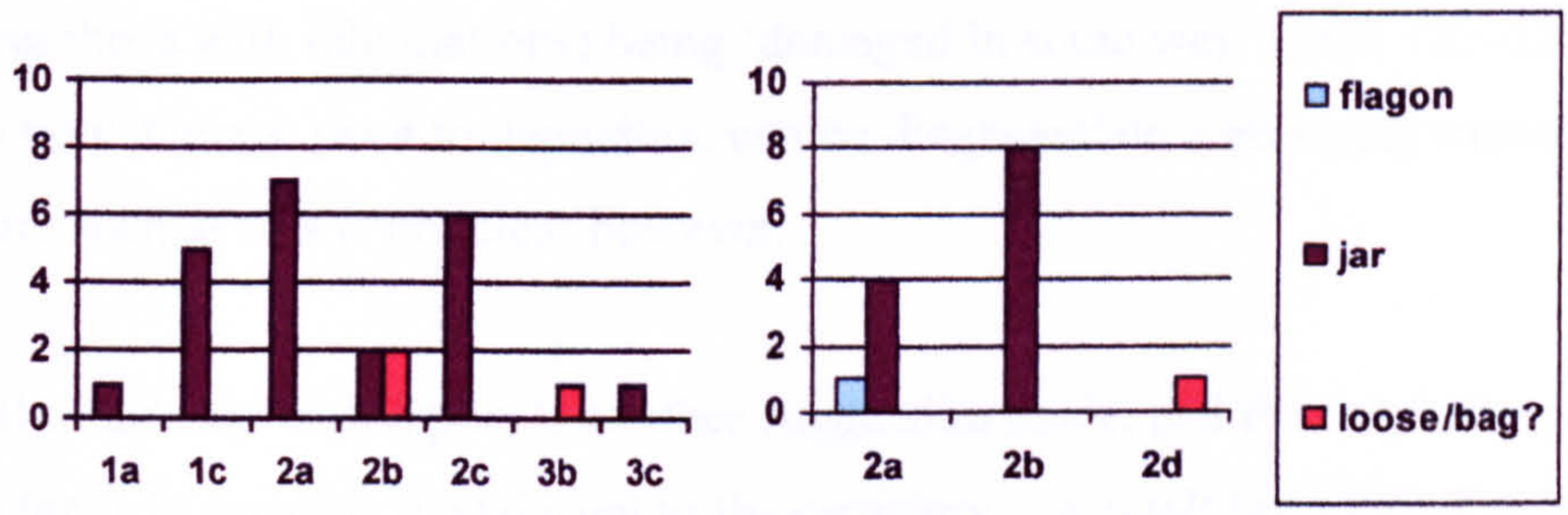


Figure 3.55: phased primary containers in Groups C (left, n= 25) and B (right, n= 14) from the east London case studies

The provenance of the 54 vessels used as primary containers where production centre is reasonably certain would appear to have been a matter of availability, perhaps primarily related to factors, other than specialist selection. Alice Holt ware from Surrey seems to maintain a minor presence throughout the phases, and Thameside Kent ware jars are increasingly being selected for the mortuary context (contributing to the developing jar tradition) from the mid–late second- and early third centuries, while numbers of burials with Verulamium White ware primary containers seem to decline at approximately the same time. The two vessels described as 'Kent products', are the beakers in (burials 179 and 842 in plot 3).

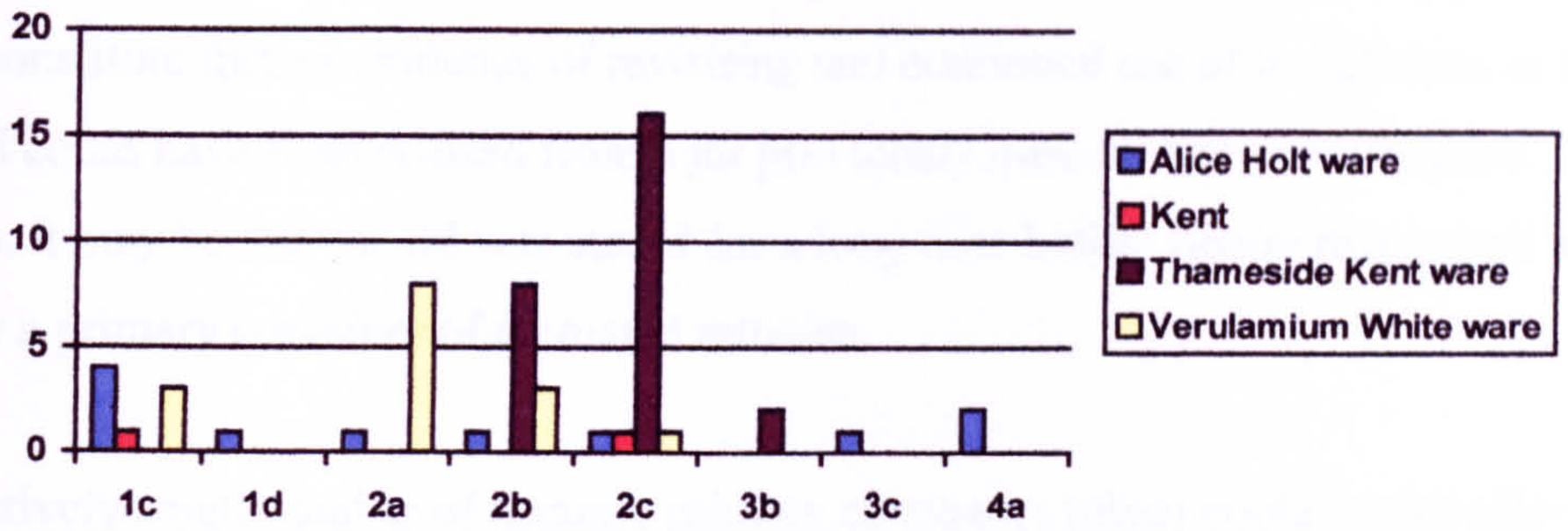


Figure 3.56: overall phasing of ceramic primary container provenance from the east London case studies (n= 54)

It may be worth noting that Thameside Kent ware is apparently one of the industries that is under represented in contexts other than burial in third century London (Barber and Bowsher 2000, 123); the original report considers the selective use of 'heirlooms' for burial on these and other grounds, such as 43% of all buried pots (apparently including those with inhumations) being 'damaged in some way' (*ibid*, 122–123). Exactly how damage prior to deposition can be diagnosed on a generally truncated urban site such as this is not clear however.

Reburial of already buried pots is another suggestion made, and the original report goes so far as to imagine '(A)djacent to the cemetery… a small business of selling pots to accompany burials, some of which might have been quietly disinterred from earlier graves, cleaned up and resold' (*ibid*, 122). We should also consider the possibility that such vessels were bought in bulk or collected by mortuary specialists and distributed or sold over time as and when they were needed/chosen. Alternatively, we might suggest that this dating conundrum simply pushes the chronology of the majority of burials with Thameside Kent ware jars more into the latter part of the second century (as date ranges allow, so more like '2b' than '2c').

It is still worth noting possible further evidence for revisiting of burials, secondary rites associated with them, or possible redeposition of cremation burials here (see below). This for example might provide an alternative explanation for what the original report refers to 'the curious case of B333' (*ibid*, 122), where the lid appeared to be much older than the primary container it covered. The possibility of re-use of a

lid from another jar (presumably 'found') is put forward in this case, but again this may constitute further evidence of revisiting and continued use of burial sites, in that the lid could have been re-used from a jar previously used for the same remains. Again, it may be that the lid was stored for a long time before finally being used as a lid for a primary container of cremated remains.

A relatively small number of ceramic primary containers (nine) could be described as 'seconds' or possibly 'seconds' (the latter being of noticeably lower quality than the rest of the assemblage). Were such containers also 'set aside' or bought up by those involved in the cremation burial 'business'? Such parties may either have been the specialist cremators themselves (using the vessels to give the remains to those who wanted to go on to deposit them) or simply selling pots to be used for burial purposes.

The 'seconds' were found in plots 2 (burials 325, 388, 839) and 3 (burials 195 [both flask and jar used as primary containers in this 'dual cremation burial'] 251 and 268) in Group A, and plot 28 (burials 763 and 785). The fact that both primary containers in burial (or burials) 195 were of this quality may suggest that either two vessels of this sort were placed in the same context, or that inter-cutting, or adjacent burials shared this trait. It is also interesting to note that three of these burials (251, 325 and 785) were also amphora burials which represent some of the more complex and elaborate deposits on the site as a whole.

Ceramic primary containers in eleven burials (from all groups) seem to show signs of modification. Jars in plots 2 (burial 840) and 28 (burial 759) had holes in the side and in the side and base respectively, while a number of the vessels (burials 368 in plot 2, 179 [a beaker] in plot 3, 998 [a flagon] in plot 17, 771 and 776 in plot 21, 759, 760, 795 and 798 in plot 28 and 799 in plot 29) showed signs of burning or close proximity to fire.

It cannot be known whether either quality was a matter of selection or modification as part of ritual; the jars with holes may in this way be analogous with 'seconds', and perhaps set aside for this specific purpose, as opposed to being 'ritually killed'. It could also be significant that the majority of 'sooted' or burnt pots were found in Group C, and therefore nearer to 'pyre debris deposits' and 'undefined burials'

containing pyre material. It is possible that these vessels provide evidence of spatial association of primary containers with the pyre, and/or wholesale collection methods at the pyre's edge (using the primary container vessel?).

The majority of burials with vessels affected in this way (burials 759, 760, 771, 795, 798, 799) are dated to the late first- or second centuries (phases 1c or 2b), and all appear to be adjacent to 'pyre debris deposits' (see Barber and Bowsher 2000, 40, Fig 38; 42–43, Fig 39) which are possibly to be dated slightly earlier, around 70–120 (Barber and Bowsher 2000, 67). It is possible then that disturbance of pyre material through digging of the burial pits in the second century resulted in 'sooting' of vessels (although such contamination might also have occurred during excavation).

Secondary containers

An interesting minority of burials (nineteen) certainly included secondary containers (appendix 6.5) and the majority of these (thirteen) definitely used amphorae for the purpose.

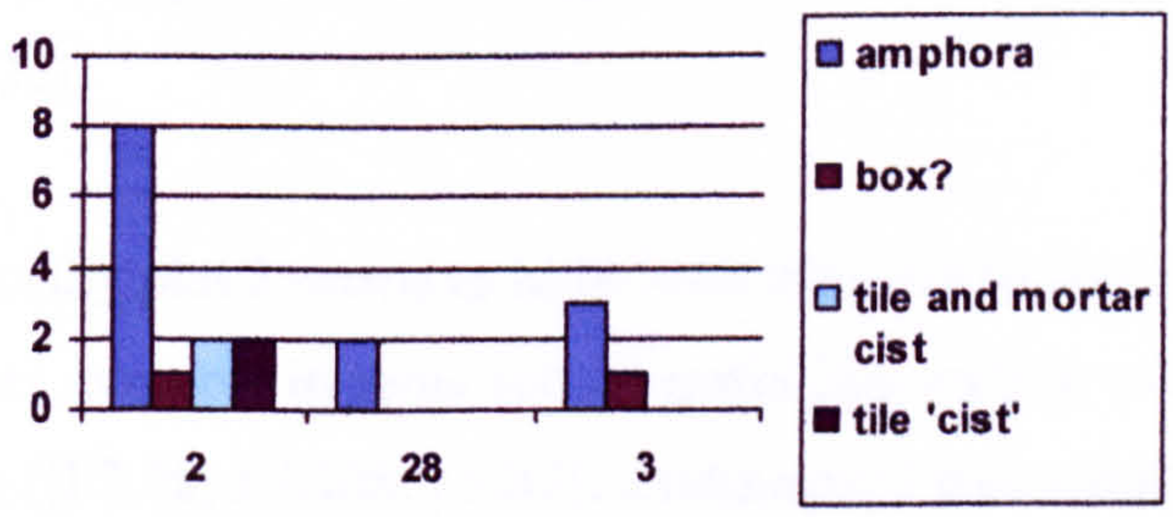


Figure 3.57: secondary container types from the east London case studies by plot (n= 19)

It is also notable that the majority of amphora burials[11] were found in Group A, with most clustering in plot 2 (burials 301, 303, 325, 349, 368, 399, 417 and 838 in plot 2, and burials 175, 231 and 251 in plot 3). Burial 399 was also the one secure 'double burial' (child and infant remains identified) that used a jar as a primary container as

[11] The report refers to '18 amphora cremation burials' (Barber and Bowsher 2000, 107), but this presumably includes burials where only amphora fragments were recovered. As these may have simply acted as lids (see below), they are not included as 'amphora burials' here. Wooden boxes or 'organic lining' of pits are even more difficult to interpret or define (*ibid*).

opposed to a beaker. The dating of these Group A examples seems to suggest a developing localised tradition that peaks in the mid–late second century.

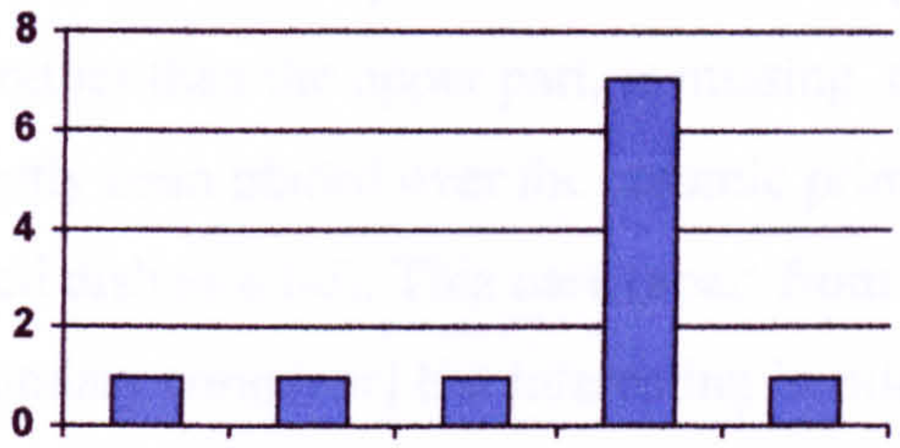


Figure 3.58: phasing of amphora burials in Group A from the east London case studies (n= 11)

Only two amphora burials were found in Group C (burials 753 and 785 in plot 28), these also being dated to mid–late second century (phases 2b and 2c respectively).

Further variability of secondary container was also noted in Group A in the mid–late second century and later, with tile cists (burials 297 and 333 in plot 2), tile and mortar cists for possible 'Brandgrubengräber' (burials 567 and 568) and possible wooden containers (burials 290 in plot 2 and 173 in plot 3). Burial 333 is the latest of these other types (phase 3c).

Group A, and especially plot 2 seems to have been the main focus for use of secondary containers, possibly in some sort of spatial association with putative mortuary structures ([F7.78; F7.108; F5.32]; monuments? mausolea?) and/or ditches [F7.62; F7.103] (see Barber and Bowsher 2000, 23, Fig 18). These features are admittedly not securely dated as being contemporary; the former was apparently 'dug and backfilled by at least the middle of the 2nd century', the backfill of the latter 'incorporated residual material spanning the end of Period 1 [late second century] to Period 3 [mid–late third century]' (Barber and Bowsher 2000, 19; 21). It would seem that the northerly F7.62 is contemporary with the development of secondary container use for cremation burials in this plot.

Most of the amphorae were of the same Dressel 20 type, although two were of Pelichet 47 type. Only one of these (burial 838) was intact and in its original context,

being spatially separated from the others, in the southern area of plot 2. All amphorae will surely have required modification, or to have already been broken, as they seem to have contained all objects (including ceramic primary containers in most cases) associated with them. The modified amphora in burial 753 in plot 28 is however unique in that the base, rather than the upper part, is missing, the whole secondary container having apparently been placed over the ceramic primary container (a jar complete with an inverted dish as a lid). This case (apart from being an example of diversity in use of a secondary container) has interesting implications for continued access to and manipulation of burial deposits (see below).

In plot 2, burial 333 was certainly contained in a tile cist, while excavators noted that the tile fragments of burial 297 may have been more like 'packing' (Barber and Bowsher 2000, 108). In both cases, different types of broken tile appear to have been used (see Barber and Bowsher 2000, 108, Fig 76), and we might suspect that little modification of these materials was carried out especially for the building of the 'cist' in either case (unlike well built cists using five or six tegulae forming a 'neat' cube for example, as seen elsewhere); certainly the cists for the two possible 'Brandgrubengräber' (burials 567 and 568) seem to have been more carefully designed and to have used more select materials (*ibid*, 107, Fig 73).

Burial 290 in plot 2 is the most likely candidate for 'box burial' on this site, and it is interesting that the soil stain apparently representing this secondary container seems only to have been large enough to contain the small amount of objects (primary container and lid *in situ*, see Wardle *et al* 2000, 165). The other more probable 'box burial' (burial 173, plot 3) seems to have contained a loose or bagged cremation deposit, but is evidenced by iron and copper alloy fittings (*ibid*, 149).

Accessory vessels

An extraordinarily low number of accessory vessels (appendix 6.6) overall were recorded for these sites, marking a particularly localised facet of the profile. In fact, of the 88 burials in original contexts where numbers of accessory vessels are reasonably certain, 69 burials had none at all, only sixteen burials had one accessory vessel, only

three burials had two accessory vessels (one of these was 'dual cremation burial' 195, which probably ought to count as two burials) and only one burial had three.

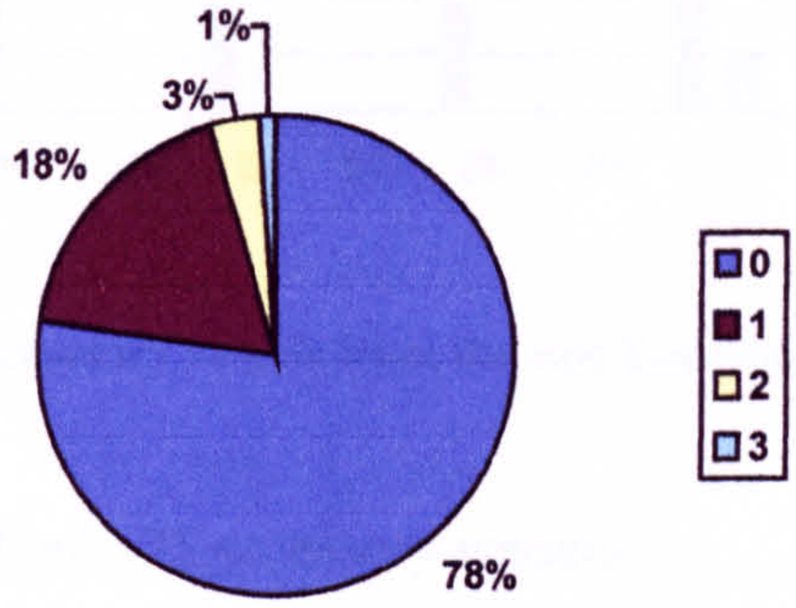


Figure 3.59: numbers of accessory vessels per burial from the east London case studies (n= 88)

The 20 burials with accessory vessels (significantly including those used as lids, see below) are mainly dated to the mid–late second century and early third, a time when numbers of burials overall increased. Larger numbers of burials from this period therefore surviving intact, perhaps biasing results.

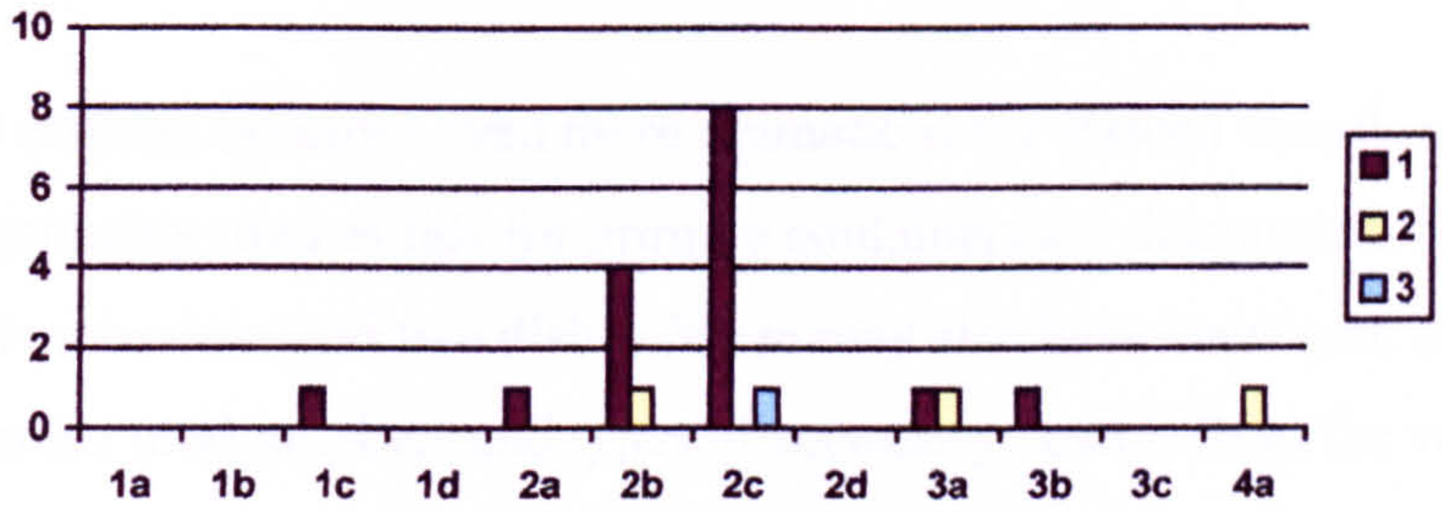


Figure 3.60: phasing of accessory vessel numbers in burials from the east London case studies (n= 20)

Variant survival conditions between plots also make spatial comparison difficult. Nonetheless, increased numbers of accessory vessels appear to be mainly associated with some of the mid–late second century and third century burials of Group A (plots 2 and 3); only three burials elaborated in this way in Group B (plot 16), and only four burials in Group C (plot 28).

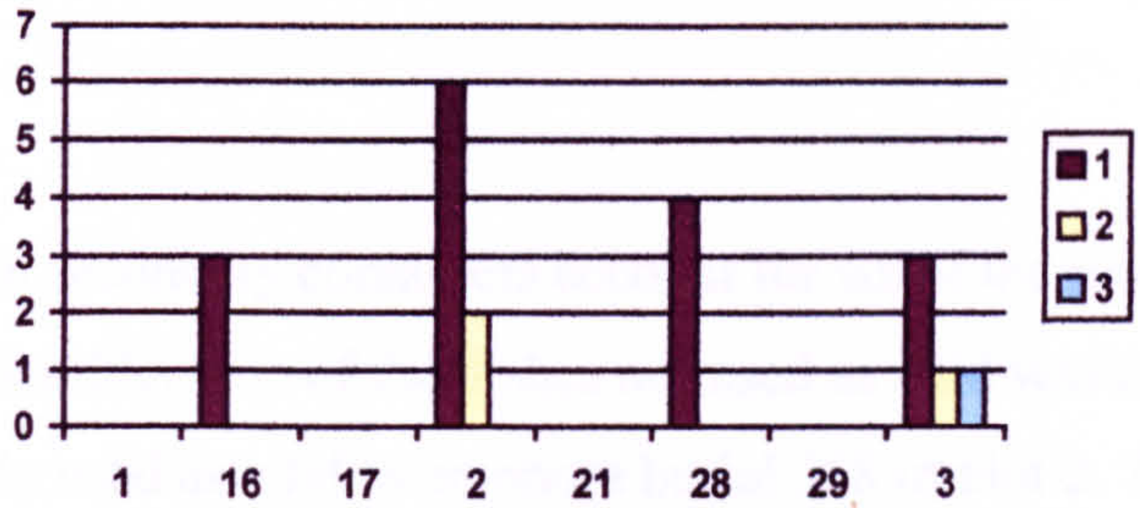


Figure 3.61: numbers of accessory vessels from the east London case studies by plot

This then represents a total of only 25 accessory vessels.

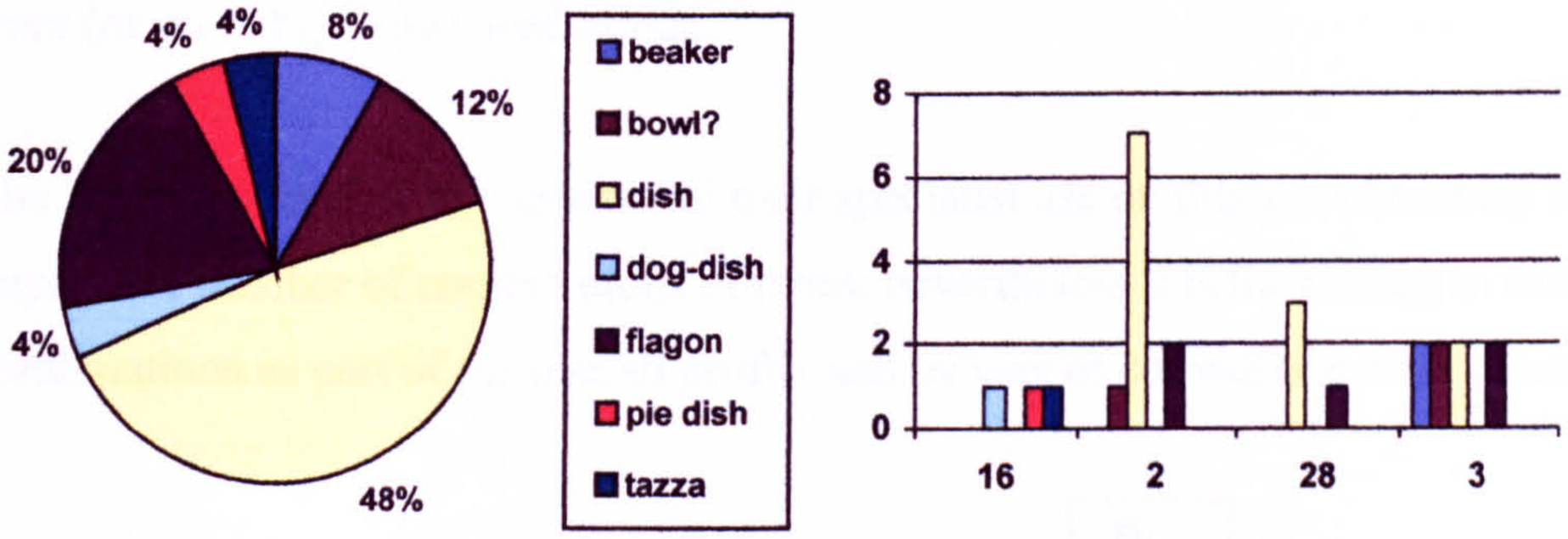


Figure 3.62: overall types of 'accessory vessel' from the east London case studies (n= 25) and distribution by plot

However this statistic becomes even more dramatic if the sixteen vessels either definitely or probably used as lids for primary containers are discounted, leaving only five flagons, two beakers and two dishes (these may also have been used as lids at some stage) as the total numbers and types of accessory vessels from the whole site.

Moreover, four of the five flagons came from only two burials (amphora burials 175 and 301 in Group A with two each) and dated to phases 2c and 2b respectively, while the remaining lone flagon in another burial (760, the only burial with an accessory vessel not used as a lid in plot 28 or Group C as a whole) may have been slightly earlier or contemporary (phase 1c). The two beakers deposited were perhaps slightly later, one included in possible box burial 173 (plot 3, phase 3a) and the other in one of the two burials probably represented by 'burial' 195 in plot 3 (probably that with a flask as a primary container. Amphora burial 175 also contained an open form vessel

used as a lid, making this the burial with the most accessory vessels (three) on the site as a whole.

The fact burials with secondary containers account for six of the nine vessels in this category is also noticeable. One of the dishes not used as a lid was found with a similar dish probably used as a lid in amphora burial 368 in plot 2. Thus 'doubling' of accessory vessel types (in terms of flagons and dishes) was a quality of rare elaboration on this site, associated with amphora burials of Group A in each case.

The majority of vessels (sixteen) other than primary containers on the site then were various types of dishes (twelve) bowls (three) and a tazza (burial 675 in Group B) that were (or probably were) used as lids.

The scarcity of accessory vessels and their specialist use on this site obviously has an impact the number of combinations of types; nevertheless it is interesting to note the combinations as part of the overall profile and by way of comparison with other sites.

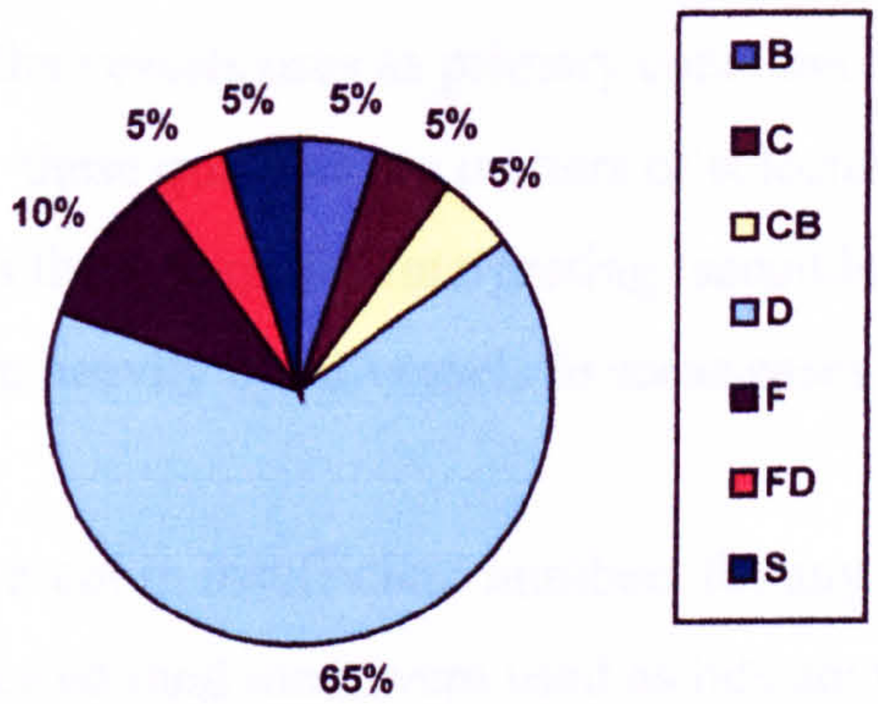


Figure 3.63: accessory vessel combinations from the east London case studies (n= 20)

It should be especially noted that there are no samian vessels in cremation burials in any of the plots.

Provenance of accessory vessels might have some significance. For example both flagons in burial 301 were Brokely Hill ware, while both flagons of burial 175 were of Nene Valley, Colchester or Oxfordshire manufacture (both apparently from the same source). The lone flagon of burial 760 was of Verulamium White ware. While

availability is probably an issue here, there is nonetheless a noticeable pattern. Beakers of burials 173 and 195 were from the Nene Valley (colour coated) and imported (Moselkeramik) respectively (perhaps making these more personalised deposits?) Most of the open forms were fairly nondescript BB1 and BB2 vessels, although one dish in burial 368 was possibly a miniature form. It is also very interesting to note that the dish in burial 362, inverted and used as a lid, was apparently decorated on the underside of its base as well the body; was this vessel made or at least decorated especially for inversion, or specially selected on these grounds? Another specialist form, the tazza (incense burner?), was used as a lid in burial 675 in plot 16.

The use of 'seconds' and/or vessels modified through burning or puncture holes is noticeably common (9 of 25 vessels in total) among the accessory vessels. One of the flagons in burial 175 and open forms (dishes or dish/bowl?) in burials 368, 175 and 251 could be described as seconds. The same flagon in burial 175 had three small holes in the body while the dish used as a lid in burial 251 had a hole in the base. Open forms probably used as lids in burials 559, 368, 279 and 753 had been burnt to varying degrees. As with the vessels uses as primary containers affected in this way, we might wonder whether these qualities are matters of selection or ritual associated modification, especially as the criteria for interpreting 'seconds', such as warping, can also be applied to the more heavily burnt vessels in some cases.

Accessory vessels were present in insufficient numbers for any significance of positioning in plan to be tested (and most were used as lids anyway); even so, there was sufficient diversity to suggest no general specialisation in this area. Again it is complex spatial relationships of objects in burials that appear to be significant. In all of the amphora burials with accessory vessels the latter were placed inside along with the primary container. Of the thirteen cases where open forms were certainly used as lids, most (those in burials 297, 325, 362 in plot 2, 175 and 195 in plot 3, and 255, 675 [the tazza] in plot 16) were inverted for the purpose. Burials 696 in plot 16 and 753 in plot 28 are the only known deviations from this pattern.

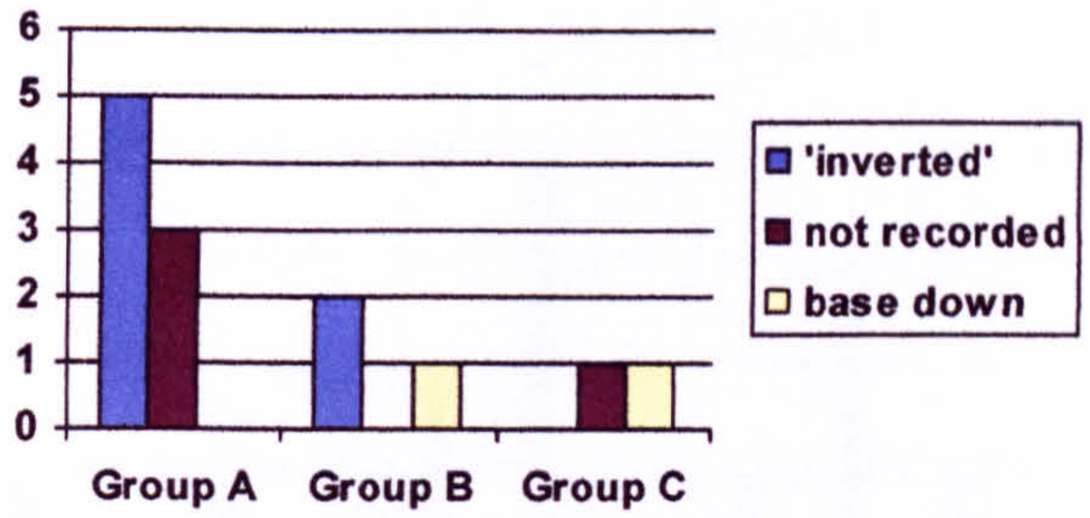


Figure 3.64: vertical position of open forms of ceramic vessels used as lids from the east London case studies

Other accessories

Only 26 other accessories (appendix 6.7) were recovered from the entire site. But while the overall majority (70= 80%) of 88 burials where such analyses could be carried out apparently did not contain any other surviving accessories, a significant minority contained at least one such object; (15) contained one 'other accessory', an amphora burial in plot 2 (burial 325) contained two, and another burial (burial 839) contained three. Finally, a burial in plot 16 (burial 1092) was particularly elaborated and apparently specialised in this fashion, with no less than five other accessories.

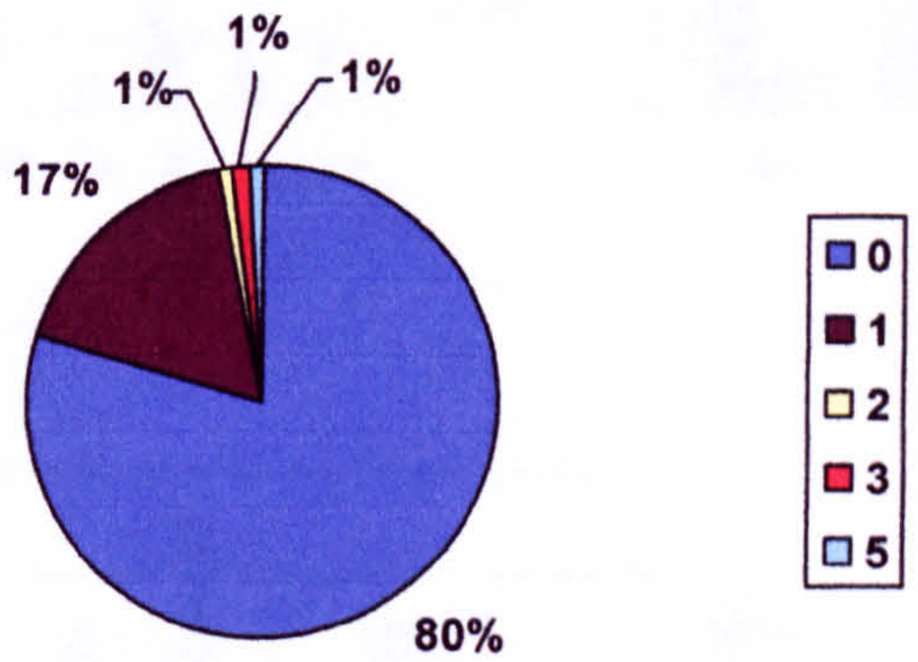


Figure 3.65: numbers of other accessories per burial from the east London case studies (n= 88)

Phasing of the data shows a marked increase in burials of this type in the second and third centuries (and fairly evenly between groups, see below).

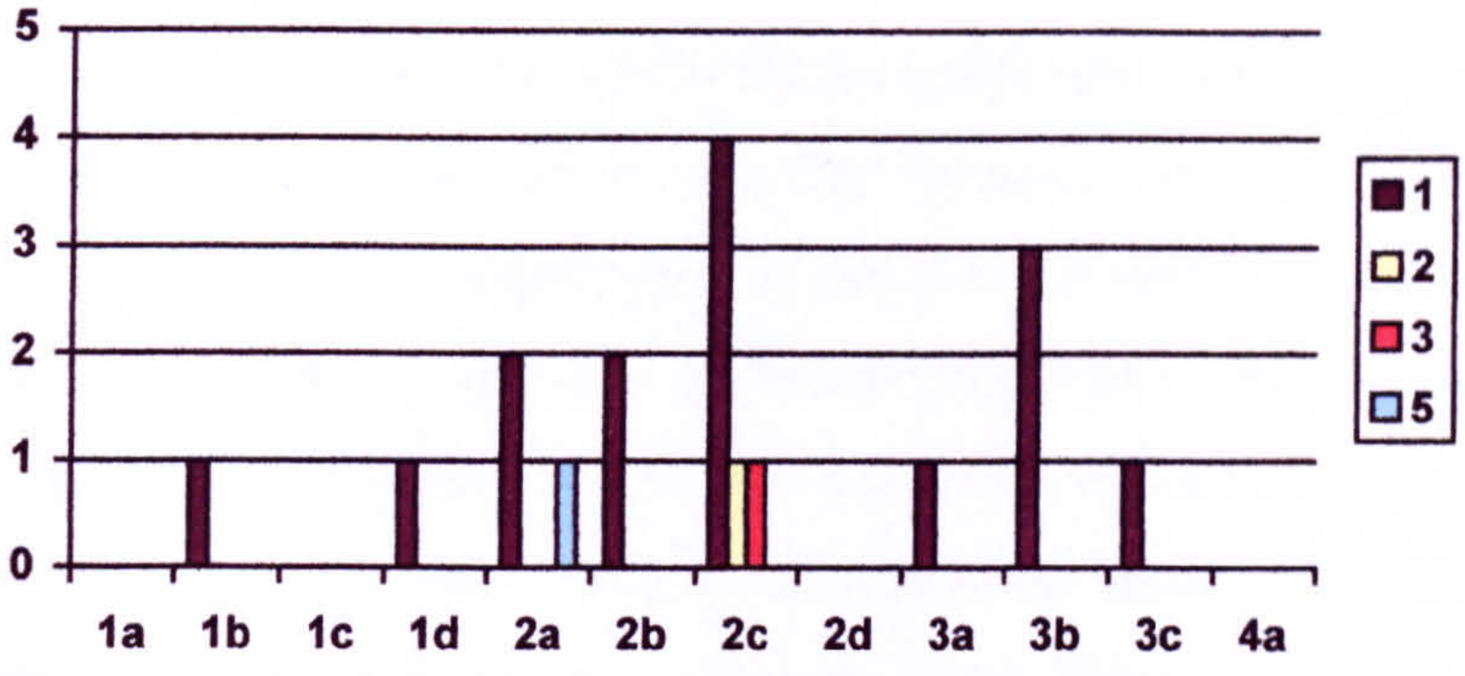
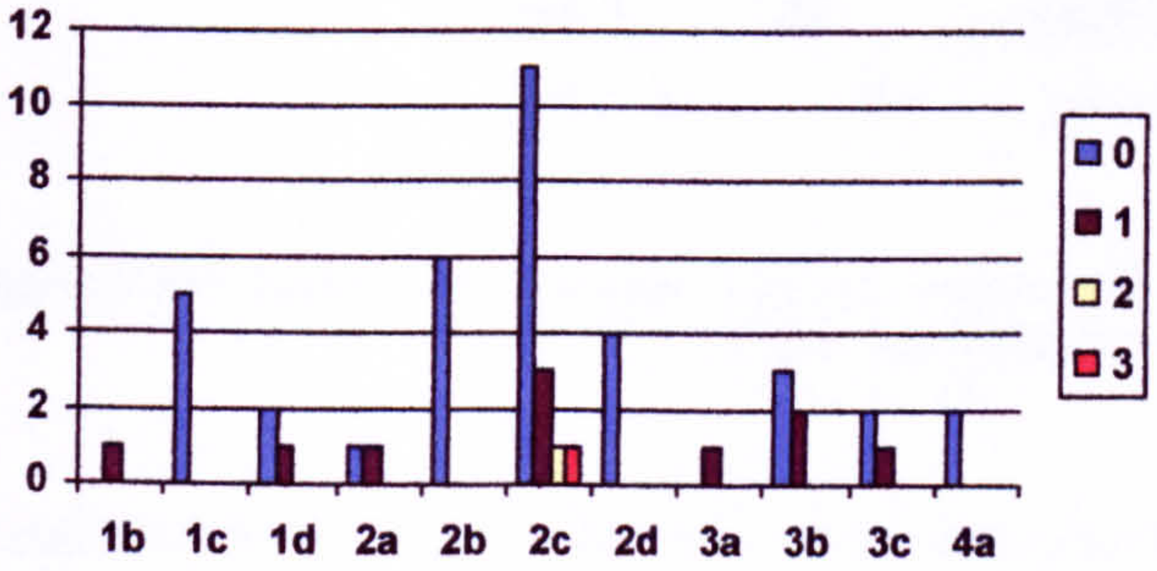
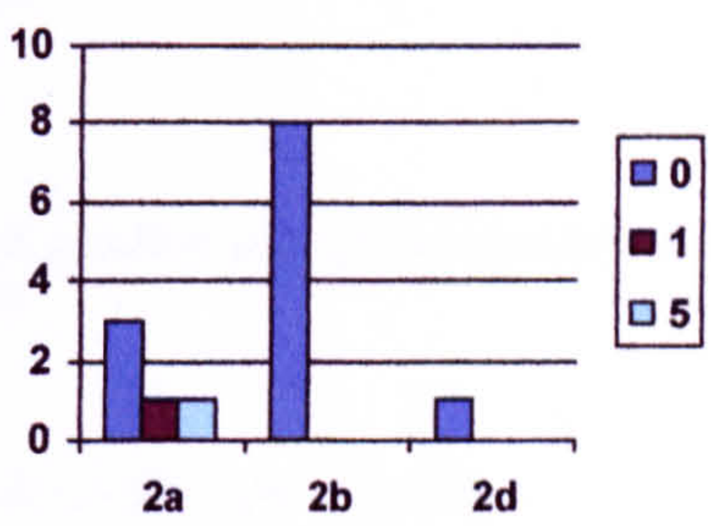


Figure 3.66: phasing of burials with one or more other accessories from the east London case studies (n= 18)

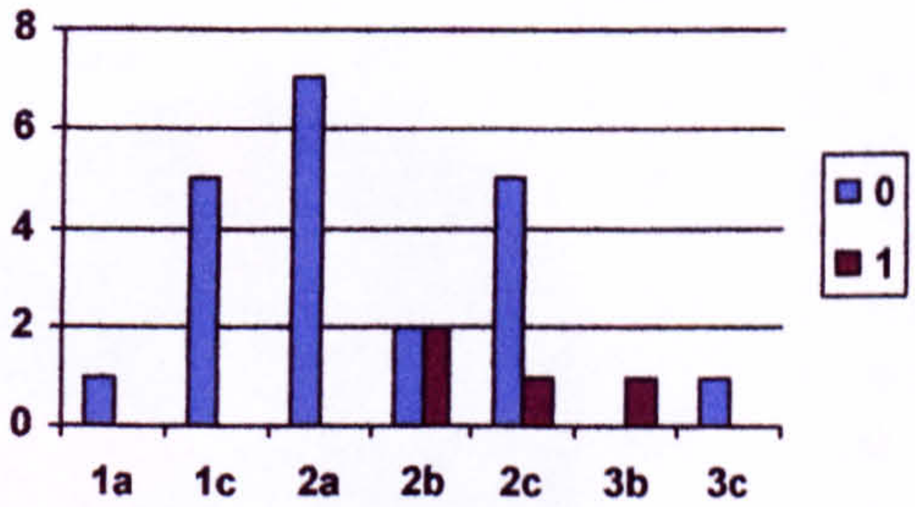
Analysis of levels of inclusion of other accessories therefore suggests an interesting pattern, perhaps of a local tradition relating to a certain group of the cremated and buried population being more likely to be buried with other accessories as overall burial numbers increased in the second and third centuries.



Group A (n= 49)



Group B (n= 14)



Group C (n=25)

Figure 3.67: Phased numbers of other accessories per burial from the east London case studies by group

Furthermore, in spite of the serious constraints accepted when attempting to judge the sex or age of individuals represented by cremated remains, and accepting the limitation these place on any interpretation, it seems that it may be worth testing in this case. If those with other accessories considered as possible females (eight) are counted in with the more definite females (two), and those considered possible males (one) are counted in with the more definite males (one) an interesting pattern appears to emerge here; were other accessories on this site more often associated with adult and more elderly females than those of other sex or age groups?.

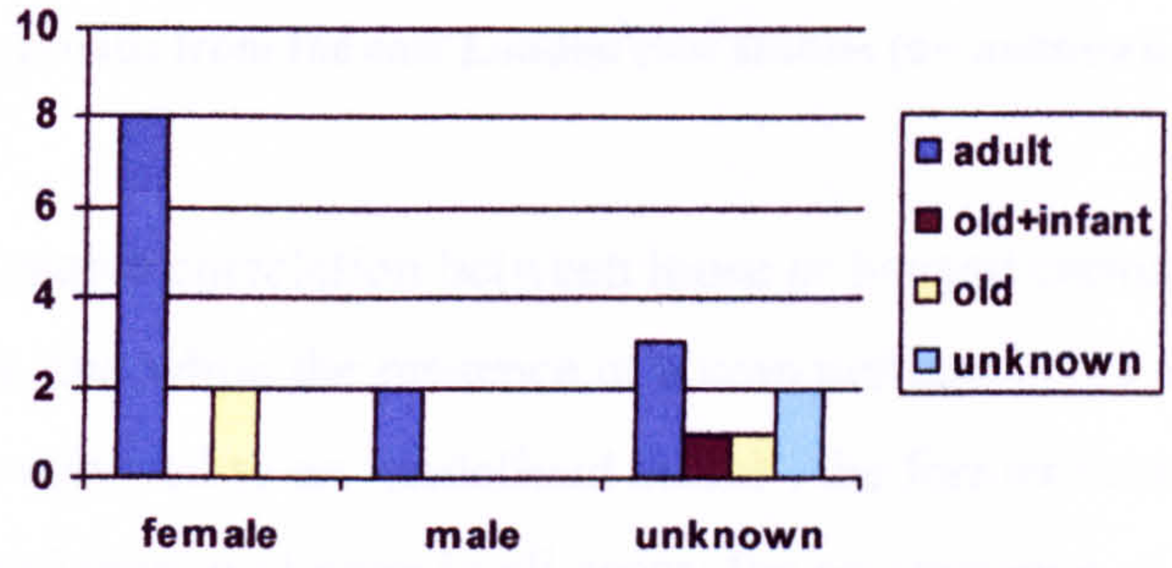


Figure 3.68: comparison of burials with other accessories with possible sex/age categories in east London case studies (n= 18)

It might be possible to reconsider this from the perspective of types of other accessory, of which there is some diversity.

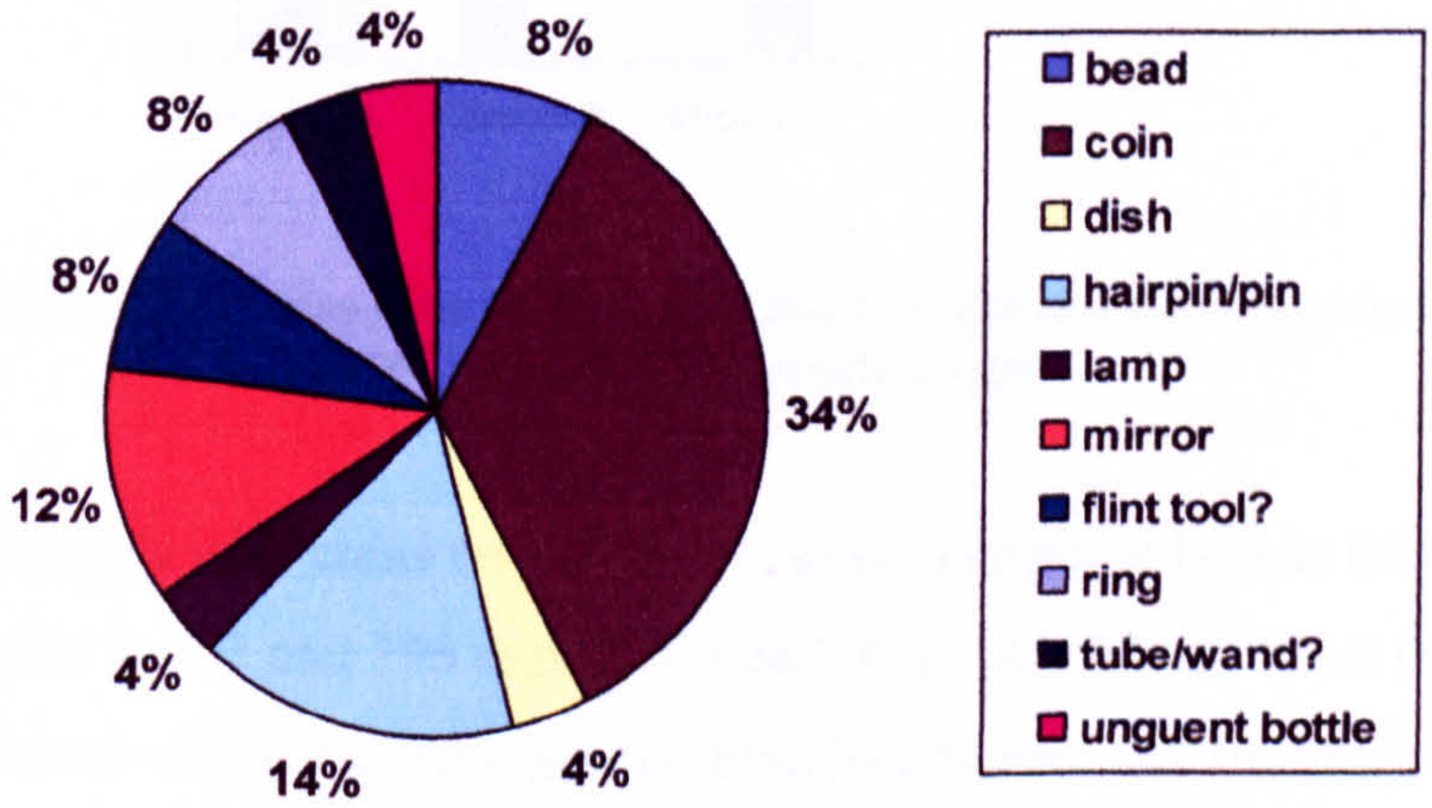


Figure 3.69: types of other accessories from the east London case studies (n= 26)

Coins obviously make up the most common type, being found singularly in nine cremation burials from all spatial groups and various phases.

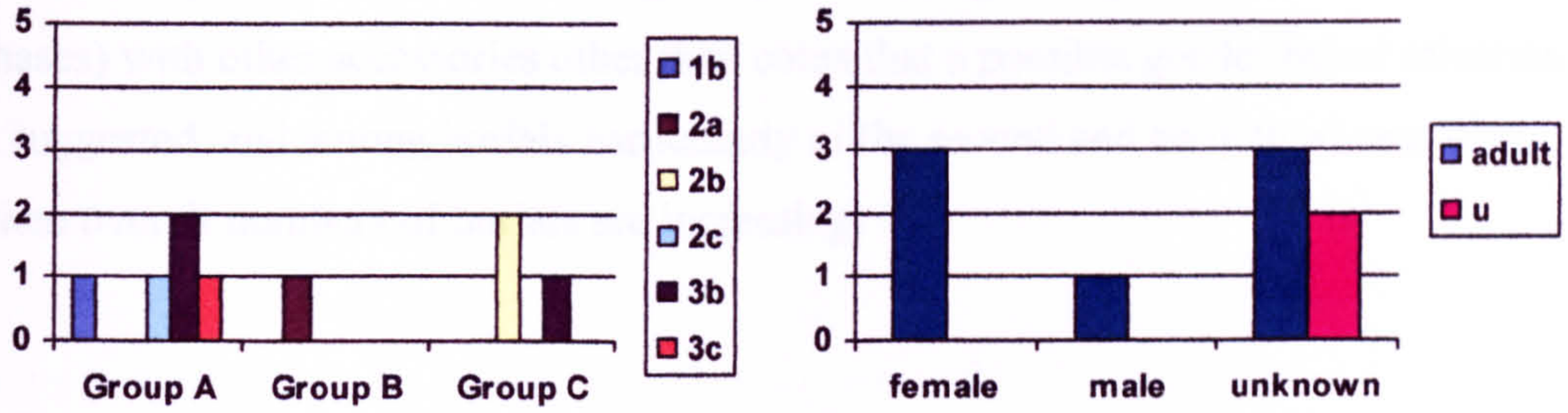


Figure 3.70: spatial distribution and phasing of burials with coins as compared with possible sex/age groups from the east London case studies (u= unknown, n= 9)

There is also a noticeable correlation between loose or bagged cremated bone deposits in burials and coins, and while the presence of a coin perhaps helps to define a cremation burial as opposed to an 'undefined burial', the former burials also seem to have contained sorted cremated bone in all cases; the concurrence of coins in burials with loose or bagged deposits therefore seems to be reasonably secure.

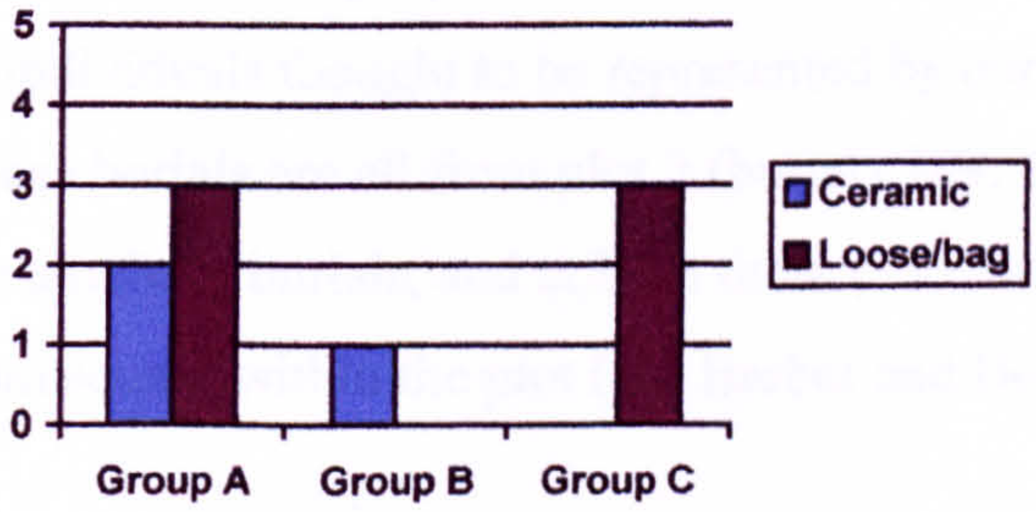


Figure 3.71: burials with coins from Groups A, B and C in the east London case studies compared with primary container type

Loose or bagged burials with coins were found in almost adjacent burials 845 and 846 in plot 2, 176 in plot 3, 792 and 796 in plot 28 and 797 in plot 29; the latter three burials were all found within the same general area (see Barber and Bowsher 2000, 42–43, Fig 39. Coins were also found in burials with ceramic primary containers in plot 2 (burials 325 and 584) and in the relatively elaborate burial of plot 17 (burial

1092); the possible sex and age profile appears inconclusive in the coinage group (see Figure 3.46).

Rather it is perhaps in the burials (again spread among Groups A, B and C and across phases) with other accessories other than coins that a possible gender based selection is suggested, and among burials particularly of the second and early third centuries, when overall numbers of burials are increasing.

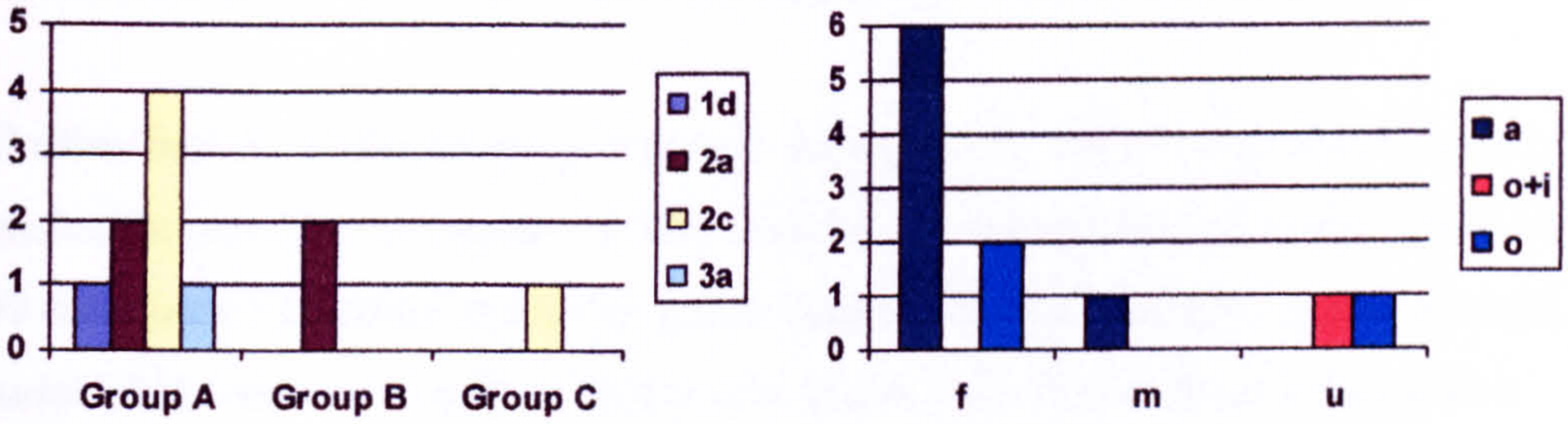


Figure 3.72: spatial distribution and phasing of burials with other accessories from the east London case studies (except those with coins, n= 11) compared with possible sex/age groups ('a'= adult, 'i' = infant and 'o' = older adult)

It might also be noted that four of these burials seem to have included remains of more elderly people, a considerable proportion of the nine burials identified as such overall (i.e. of the 90 individuals thought to be represented by burials from secure and original contexts). These burials are all from plot 2 (burials 399, 362, 335 and 368), two (368 and 399) are amphora burials, and at least three (335, 368 and 399) appear to cluster within a 10.00m square within the plot (see Barber and Bowsher 2000, 18, Fig 13).

In terms of possible gender related deposition, it is important to remember that 'possible females' make up a significantly larger group in the specialist's analysis than 'possible males'.

Indeed the relative scarcity of other accessories overall, as well as the diversity in terms of choice and number of such objects for each burial, might suggest some form of 'personalisation' of burials beyond or perhaps even associated with age or gender considerations. For example, in plot 2, almost identical single beads were found in the

burials of an adult possibly male (burial 343) and of a possibly female elderly person (burial 335). A ceramic lamp had been placed in the amphora burial (burial 325) of an adult possibly male as well as a coin. Another amphora burial (burial 399) holding the remains of an elderly individual as well as an infant, also contained the remnants of a pewter dish among the cremated bone (perhaps originally used as a lid). In a further two burials in plot 2 (burial 290, an adult possibly female, and burial 362, an apparently older person of unknown sex) a flint flake and a broken flint tool had been placed respectively. It might be significant that both burials were datable to the second century, and both came from approximately the same area of plot 2.

All other burials of this category probably contained the remains of adult or elderly females. In plot 2, amphora burial 368, contained a fragmentary bone pin, while burial 839 contained 3 hairpins of similar simple design. In plot 3 another amphora burial (burial 231) contained a mirror, and in plot 16, burial 675 contained a ring with a jasper or sard onyx intaglio depicting a satyr on a rock (NB. This object is described as 'burnt on pyre' in the caption for the photograph [Barber and Bowsher 2000, 199, Fig 85] and nowhere else in the published report [!]; it therefore may provide evidence of a very particular and interesting pyre good, with further implications for collection and sorting methods).

By far the most elaborate burial of this kind however was burial 1092 in plot 17, containing, as well as a coin, two mirrors, a glass ring with stone setting like an intaglio, and a glass unguent or perfume pot (several items being having special selection/modification qualities, see below). A strange tubular copper alloy object, and lozenge shaped plate from amphora burial 785 in plot 28 may be the remains of some sort of 'wand' (Wardle et al 2000, 236) or perhaps part of an object for 'allowing continued access to the burial (Barber and Bowsher 2000, 108).

All coins appear to have been fairly similar types (especially if phasing is taken into account) and of relatively small denominations, although some are reported as being silver.

Group	Phase	Plot	Burial	Description	Small Find No.
Group A	1b	3	176	as/dupondius, illegible and heavily corroded	136
Group A	2c	2	325	Hadrian, dupondius, fairly heavy wear	270
Group A	3b	2	846	copy Tetricus I	35
Group A	3b	2	584	silver wash antoninianus of Galienus	375
Group A	3c	2	845	silver copy, Gallic empire	48
Group B	2a	17	1092	as, Nero obverse, Victory reverse	1092
Group C	2b	28	796	as/dupondius, Hadrian, corroded	812
Group C	2b	28	792	as/dupondius, fairly haevy ware	761
Group C	3b	29	797	silver wash copy Victorinus/Tetricus I, ?average ware	383

Figure 3.73: table of coin types from the east London case studies

The lamp in burial 325 was an import, as are perhaps the mirrors in burial 231 and burial 1092. The mirror in the former burial was quite possibly incomplete at the time of deposition (this seems quite common), as was, interestingly, the fragment of bone pin found within the amphora of burial 368. The flint blade in burial 362 also seems to have been broken at some time prior to or during deposition. We might wonder if the breaking of these objects was a ritual act in each case.

It is the items in burial 1092, however, that are again particularly interesting in this regard. Some form of perhaps unique 'pidginisation' can be suggested in terms of decoration of one of the mirrors. This was in two sections, with the design on each apparently copying the obverse and reverse sides of a Neronic coin, with the head of Nero on the obverse and victory on the reverse. Fascinatingly, the lettering of the coin design had been replaced on the mirror by beading. It is even more interesting therefore that the coin in this burial was an as with Nero on the obverse and Victory on the reverse, and that it had been perforated, perhaps in order that it might be worn as a pendant. The glass intaglio type ring would also appear likely to be a highly personal object, and the glass unguent/perfume pot is unique for the site.

Most other accessories (at least those that have survived) seem to have been placed either within primary or secondary containers, thus complex spatial relationships would seem once again to be the significant area. All the coins were found mixed with cremated bone within ceramic primary containers or loose/bagged deposits; several (burials 235, 796 and 1092) (and possibly all) had originally been placed on

top of the bone. It is not recorded whether the obverse or reverse was uppermost in each case.

The remnants of a pewter dish in burial 399 found among cremated bone suggest that this may have been used as a lid for the primary container within the amphora, and the bead in burial 343 was found outside the primary container and to the south. Apart from this, all other such objects had either been placed within the amphora used as a secondary container (flint flake and blade in burials 290 and 362 respectively, lamp in burial 325, mirror in burial 231, broken pin in burial 368 and possible 'wand' in burial 785) or on top of the cremated bone within the primary container (ring in burial 675 [if not already burnt on the pyre and included with the bone], the hairpins in burial 839 and all five objects in burial 1092.

Combined selection

A total of 88 burials from groups A, B and C were recovered sufficiently intact for a phased comparison of overall combined selection of objects (see figure 1.17, Chapter 4 and notes to appendices) for deposition (appendix 6.1). Despite the apparently relatively limited use of accessories from the 'site' overall, an overall chronological pattern can be suggested. Burials of the early phases (limited in number) show some variability, especially in terms of primary container and the occasional accessory, although the CN0000 profile (ceramic primary container, no secondary container or any accessories) is dominant.

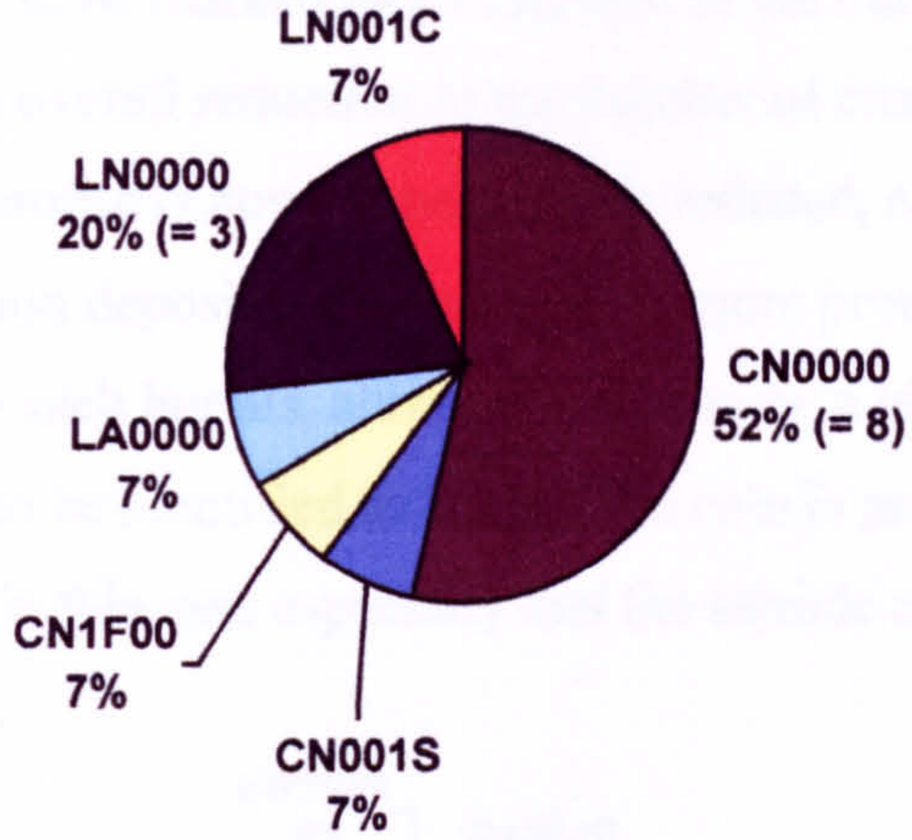


Figure 3.74: diversity of combined selection from the east London case studies, phases 1a–1d (n= 15)

However, the second century sees a marked increase in diversifications in line with increased numbers of burials overall (with only a slight proportional reduction in the CN0000 profile).

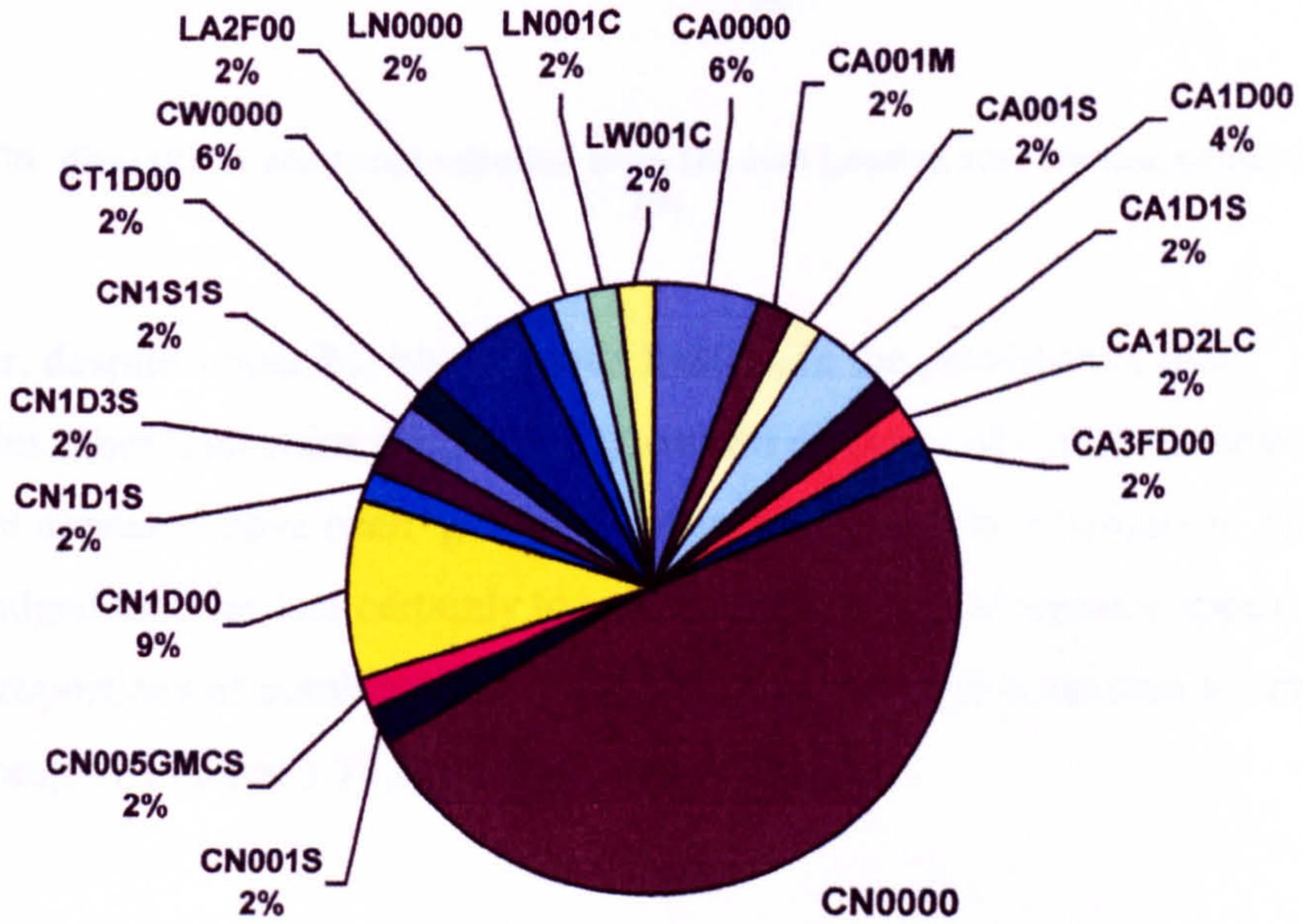


Figure 3.75: diversity of combined selection from the east London case studies, phases 2a–2c (n= 54)

The later phases appear to be marked by a reduction in the number of different profiles (in line with an overall reduction in the number of cremation burials); however, the CN0000 profile is now proportionally reduced, and burials with either loose or bagged cremation deposits seem to become more prominent (as does the inclusion of a coin with such burials, although this may be a bias in that loose/bagged burials are more likely to be identified as burials if a coin is present), although it should be remembered in this case especially that the sample may be biased.

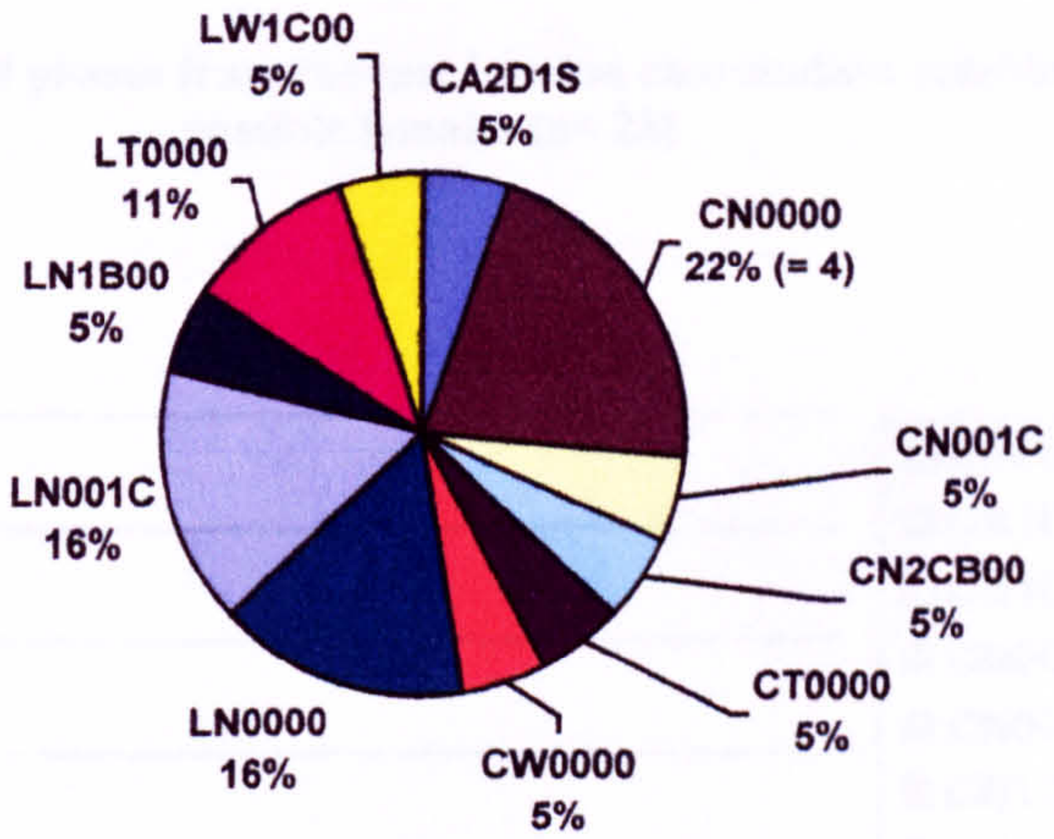


Figure 3.76: diversity of combined selection from the east London case studies, phases 2d–4d (n= 19)

Moreover, despite a possible bias towards females in the provision of other accessories other than coins (Figure 3.70), overall diversity of combined selection would not appear to have been 'gendered', from the available information. The 25 burials judged more or less certainly to contain the remains of females appear to have similar proportions of combinations to the 11 burials thought to contain the remains of males (compare Figures 3.77 and 3.78).

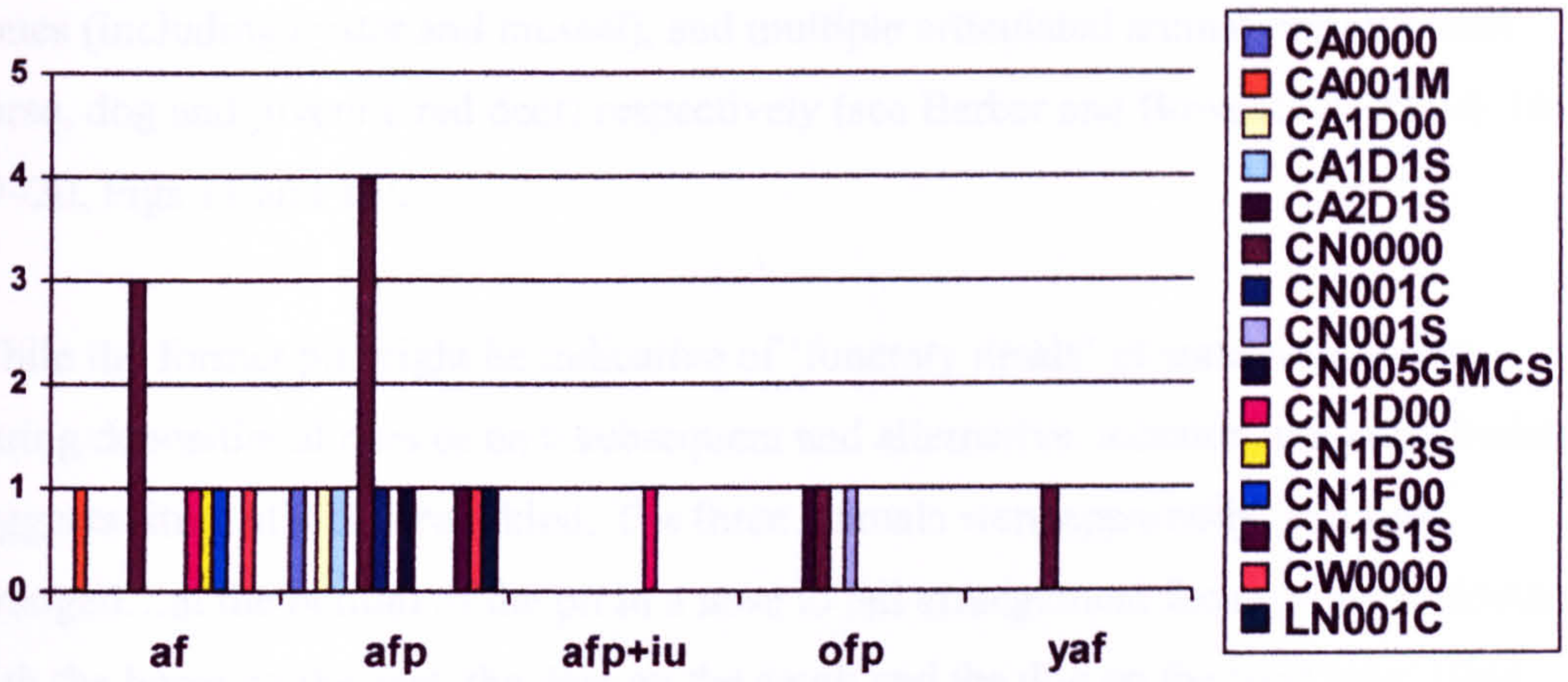


Figure 3.77: all groups, all phases from the east London case studies: combined selection and possible females (n= 25)

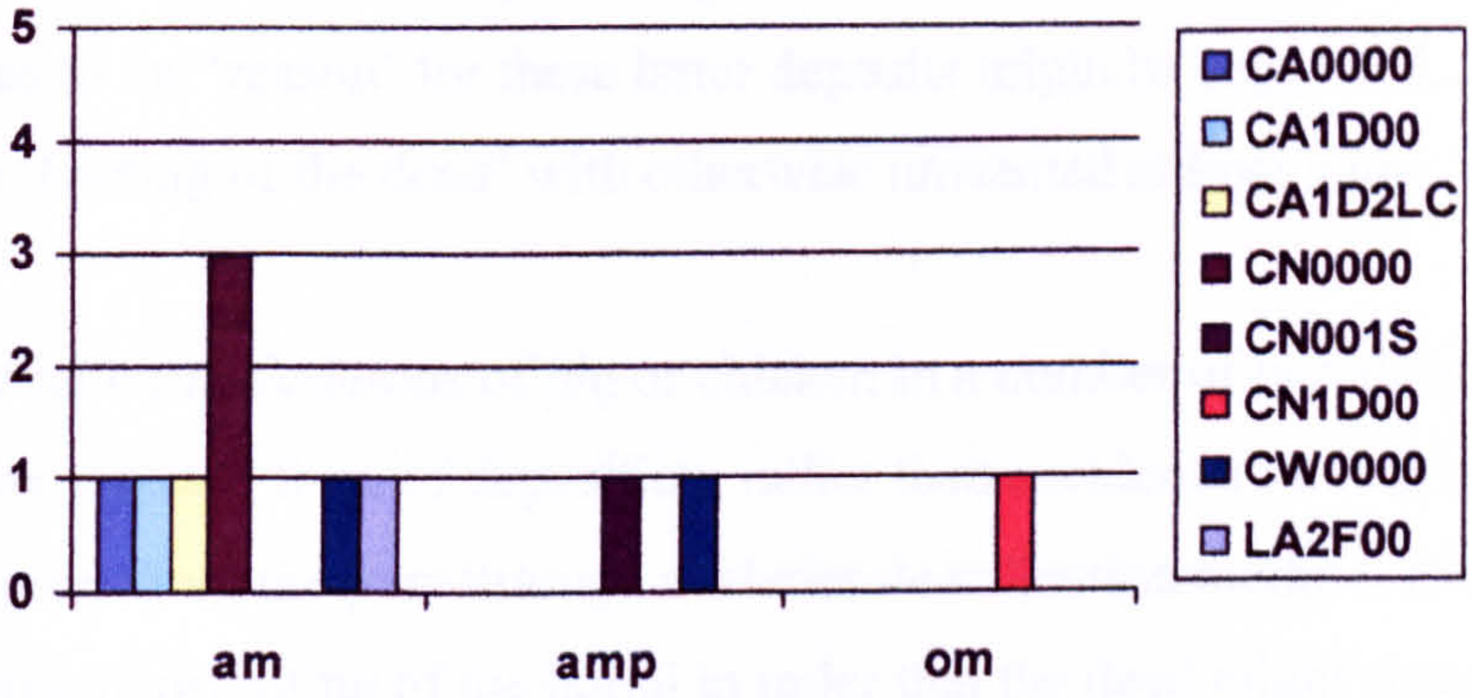


Figure 3.78: all groups, all phases from the east London case studies: combined selection and possible males (n= 11)

Post-depositional or secondary rites, redeposition

A number of features suggest ritual actions other than cremation or deposition of the results. For example, the excavators note certain qualities of the pottery assemblage present in 'pyre debris deposits': '(T)he number of amphorae, drinking vessels and beakers seems to suggest plenty of drinking going on at the site, but the low amounts of samian ware and dishes imply that there was relatively little eating' (Barber and Bowsher 2000, 67–8). It must be made clear that 'the site' referred to here might be the pyre site, assuming that the 'pyre debris' is redeposited. In terms of depositional rites, pits in plot 1 [I1.37] and plot 2 [F5.89] are of interest, in that they were found to contain apparently special deposits of multiple flagons and flagon sherds and animal

bones (including oyster and mussel), and multiple articulated animal burials (adult horse, dog and juvenile red deer) respectively (see Barber and Bowsher 2000, 14–16; 19–20, Figs 11 and 16).

While the former pit might be indicative of 'funerary meals' of some sort, either during depositional rites or on a subsequent and alternative occasion, the latter burial suggests ritual of a different kind. The three animals were apparently 'carefully arranged…at the bottom of the pit in a nose to tail arrangement facing anti-clockwise, with the horse on the east, the deer on the south and the dog on the west side' (*ibid*, 19–20). Some sort of special ritual deposit, perhaps linked with foundation or closure of the plot is perhaps suggested (dating is uncertain). Whether the two disarticulated horses and four–five cow skulls found in ditch F7.62 (plot 2) represent the same sorts of deposits, or residues of funerary feasting in the plot is unknown. Alternative suggestions as to the 'reason' for these latter deposits might be suggested, such as a superstitious 'feeding of the dead' with otherwise unwanted animal parts.

Whole or partial burnt skeletons of pig or chicken in a number of burials seem to testify to some separate form of deposition, rather than accidental mixing of the bone with human bone from the pyre through a wholesale collection method, for example. Do these represent revisiting of the burial in order that the dead might share in a funerary meal of some sort?

Another interesting category of deposition on the site is the 20 burials thought on grounds of date and/or find context by various excavators to have been redeposited (appendix 6.9). These included five burials in Group A (burials 323, 460, 337, 317 and 35, all in plot 2), eight burials in Group B (610, 735, 1088, 1095, 1123, 834, 1131 and 1157, all in plot 17) and seven burials in Group C (burials 811 [plot 20], 813 [plot 21], 814 [plot 22], 662, 765, 817 and 818 [plot 28]). As can be seen, the practise of redeposition seems to have been carried out mainly from perhaps the late second century on if dates of primary containers are counted as possible dates of original deposition.

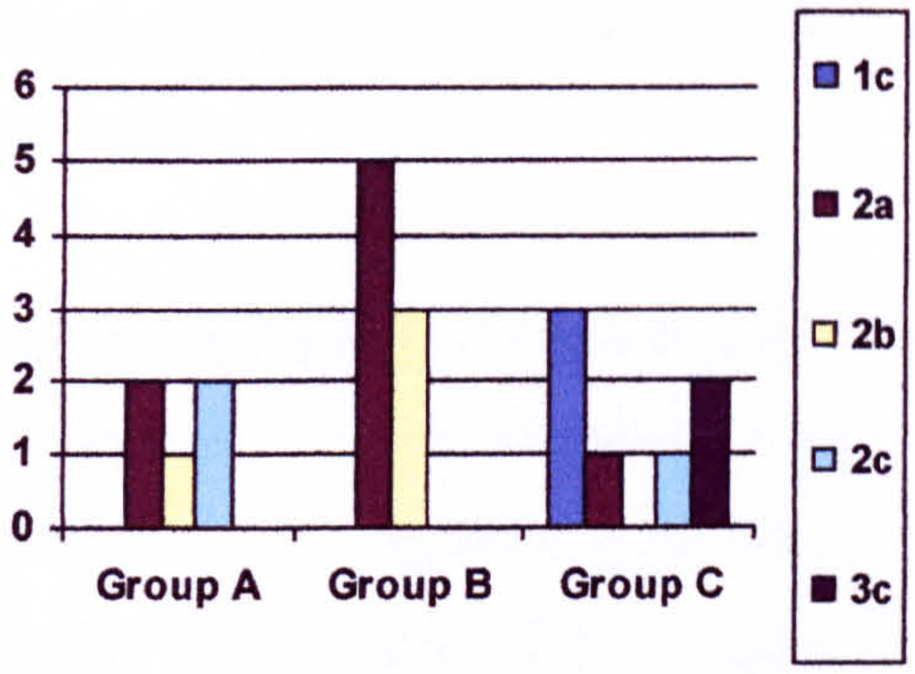


Figure 3.79: spatial distribution and phasing of redeposited burials from the east London case studies (possible dates of original deposition based on dates of pots; n= 20)

Redeposited burials appear to be over represented in Group B (8 out of a total of 22 burials), but this is probably due to the limited area of excavation coupled with particular circumstances of original disturbance.

All burials of this type used a jar as a primary container except burial 323 in plot 2 which used a flask; this pattern is similar to the types of primary container among burials deemed to be in original contexts, although redeposition of loose or bagged burials would obviously be more difficult, as would archaeological categorisation of them. Several of the vessels from burials in plot 2 (burials 323, 352, 337 and 460) could be categorised as possible 'seconds', several were 'burnt' to varying degrees (burials 460, 337 in plot 2 and 813 in plot 28) and one jar had two post-firing holes in the side (burial 817, plot 28). Again these qualities and their frequency among the redeposited burials are reminiscent of the profile presented by the burials from original contexts.

The inclusion of apparent pyre goods in redeposited burials also presents a similar profile, with fragments of bone objects in burial 352 in plot 2 and 765 in plot 28, the latter part of a needle or pin. Interestingly, burial 765 also contained not only a near complete burnt chicken skeleton, but also the articulating (burnt) left foreleg of a pig. Separate deposition of the burnt animal remains, perhaps on more than one occasion is perhaps suggested, as the necessary destruction and mixing of material on the pyre would appear to preclude recovery of such intact remains. None of the redeposited burials had accessory vessels except burial 317 in plot 2, where a dish may originally

have acted as a lid. No other accessories were associated with this type of feature (might some have been robbed?).

While disturbance through increasing use of overcrowded plots, and reverent and/or superstitious reburial is suggested, alternative interpretations can be put forward. These might include: retention of cremated bone in containers long after cremation, re-use of pots recovered intact while digging (this is suggested by the excavators as an answer to apparent over-representation of Thameside Kent ware in the late second century [Barber and Bowsher, 122]), mass storage of suitable vessels by specialists resulting in use of very 'old' pots at a later date, or disinterment of burials in order to allow the addition of cremated bone from another pyre (at least two redeposited primary containers were found to contain the remains of more than 1 individual each [burials 352, plot 2 and 817, plot 28).

Original layouts of cremation burials in plots are extremely difficult to reconstruct because of subsequent truncation by inhumation burials. Few if any of the cremation burials appear to be inter-cutting (although the putative 'dual cremation burial' 195, here considered as probably two burials is a possible candidate). Inhumation and cremation burial appear to have been concurrent rites in the cemetery as a whole, and some suggestion can be made of clustering of cremation burials, or perhaps rows in plot 2, associated with structures F5.32, F7.78 and F7.108 for example (Barber and Bowsher 2000, 23–24, Figs 18 and 19).

A total of six burials were recorded as having more convincing evidence of some sort of superstructure or marker (appendix 6.8), and all are from Group A. The fact that five out of six of these are amphora burials might be significant, given that this quality seems to be associated with the clustering of such burials in plot 2 especially. Burials 349, 368 [12] and 399 seem to form a cluster of amphora burials with in post settings at the 4 corners of the pits in plot 2 (Barber and Bowsher 2000, 18–25, Figs 13 and 19). The rag stone 'cover' over the mouth of the amphora in burial 838 and ceramic and rag stone building material overlying adjacent burial 839 might be remnants of

[12] This appears to be wrongly numbered on Figs 13 and 19 as '363', the number apparently of an adjacent inhumation.

markers or a structure of some sort. Finally in this area, a slot cut into the base of the pit for amphora burial 231 may have been a setting for some sort of marker.

Any estimate of the amount of use of lids for primary containers is course dependant on levels of truncation either through post-depositional processes or in some cases excavation methods. Nonetheless the use of lids is demonstrably widespread on the site. As well as open form 'accessory vessels'(see above), actual ceramic lids were used in a number of burials in plot 2 (burials 290, 333, and 343), plot 3 (burials 231 and 268), plot 17 (burials 1002 and 1092), plot 21 (burials 773, 775 and 776) and plot 28 (burials 760, 763, 766 and 795). Tile lids were also used in all areas of the site (burial 5 in plot 1, 839 and 840 in plot 2, 176, 179 and 180 in plot 3, 442 in plot 16, 771 in plot 21 and 752 and 759 in plot 28).

The types of object used are therefore quite diverse, but despite the relatively small sample it is possible to say that the distribution of types seems to be quite even between the spatial groups (with only minor deviations); there is perhaps a greater tendency to use vessels in Group A than in Group C, where actual 'lids' are more common.

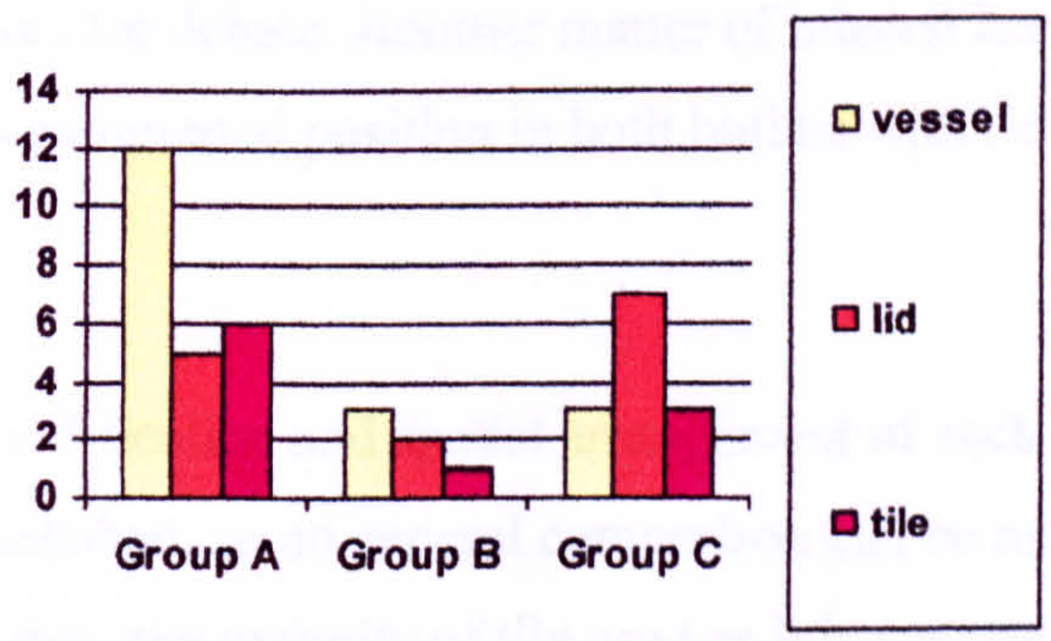


Figure 3.80: types of object used as lids in the east London case studies (n= 42)

However, the figures here once again seem to reflect the notable increase in burial in Group C in the mid–late second century, as an overall phased view suggests that the use of tiles remained reasonably constant throughout, and that the use of ceramic lids may have peaked in the second century while vessels were increasingly used in the mid–late second century.

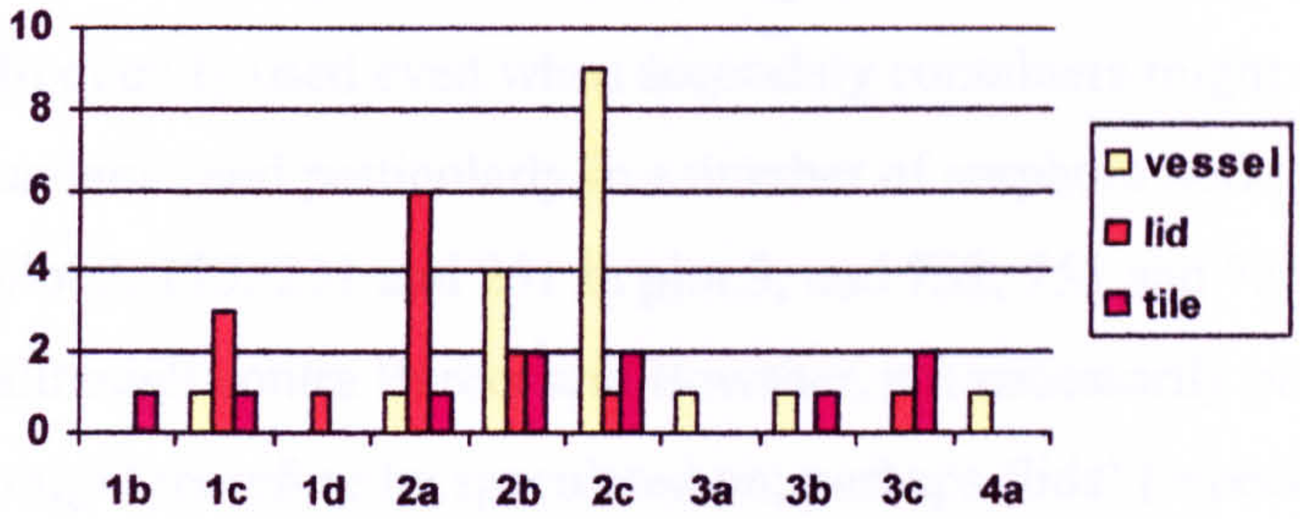


Figure 3.81: chronological trends in types of 'lids' from the east London case studies?

Some qualitative aspects of lids are also worth noting. Not all 'lids' were used for solid primary containers, for example; the top of an amphora seems to have been used to cover a loose or bagged burial in one case (burial 304, plot 2), although whether it was modified especially for this purpose, or re-used from another context is not known. A dish or bowl appears to have covered another loose or bagged burial in plot 2, and tile lid was used for loose or bagged burial 176 in plot 3.

In several cases ceramic lids were either described as 'seconds' (burials 96 and 1092), as burnt (burials 610, 104, 96 and 596) or as 'perforated' (burial 1092). Again whether the latter two qualities particularly are connected with ritual selection or modification are matters for debate. Another matter of interest here is the fact that the lid had been placed in an inverted position in both burials with lids in Group B (1002 and 1092).

Details of selection, modification and spatial arrangement of each tile or tile fragment are not recorded or published, so no general comparison can be made here. It is noted in the report however that 'the majority of tile used as lids are probably of 1st- to mid 2nd- century date, while most of the vessels over which they lie are dated late 2nd to 4th century (sic)' (Barber and Bowsher 2000, 109). It is therefore suggested that the materials were re-used, and that this explains the 'mortar still attached to some examples' (*ibid*). Also, it is noted that under fired tile was used in some cases, and that this may be compared with the use of 'seconds' in the pottery selected for a number of burials (Betts 2000, 346).

Perhaps even more interesting is the fact, noted by the excavators (*ibid*, see Fig 77), that 'lids' were frequently used even when secondary containers might seem to have made them 'redundant', and particularly in a number of amphora burials (burials 325, 368 and 399 in plot 2, 175, 231 and 251 in plot 3, and 752, 753 and 785 in plot 28). An alternative (although contra Barber and Bowsher, not necessarily purely 'symbolic') use might therefore be speculated on; perhaps 'lids' (especially vessels, which make up seven of the eight amphora burial examples listed above) were used in other secondary rites at the grave side.

Profile

Possible site level traditions

The combined evidence from the one known pyre site, 'pyre debris deposits', 'undefined burials' containing pyre material and more probable 'Brandschuttgräber' suggests once again a quite uniform cremation method and ritual. Most would seem to have been cremated on separate pyres, perhaps made of wood that had not been previously used for other purposes, and perhaps dried grasses were used as kindling. The cremations did not achieve total oxidation and mineralization of bone, as some variation was found in all the undisturbed deposits; nonetheless, the fact that so much of the bone was fully oxidised in most cases is a testament to an effective cremation and collection method that not surprisingly produced highly fragmented bone.

It would seem probable that in many cases the corpse was cremated with or wearing footwear, and with other bone, glass, wooden and copper alloy objects, as well as various animal offerings; dried pulses were either scattered into the pyre or placed at the edge in many cases. That fact that all such objects found their way into primary containers with the cremated bone suggests a wholesale collection method. Varying quantities of bone in undisturbed deposits suggest either varied pyre 'efficiency' or deliberate selection of a certain amount in each case. The latter could be explained by traditional selection of bone to be sorted from a particular part of the pyre, and although all skeletal elements are generally represented, the destruction of the corpse on the pyre through pyre maintenance could possibly account for this (consider the

mix of skeletal elements recovered from a relatively small area of the known pyre site [G0.36] for example).

The fact that so many hobnails were found in pyre debris deposits and not in cremation burial bone deposits might suggest a traditional selection of bone from somewhere other than where footwear was worn by the corpse or otherwise placed; alternatively, pyre and/or collection methods may have filtered these out of final bone deposits. Differing amounts of bone in 'undisturbed' burials might also suggest post-depositional revisiting and manipulation of the material (adding to or taking away from deposits).

Overwhelmingly the most common form of burial was simply of sorted bone in a ceramic jar with some form of lid. Among the ceramic containers, 'wasters', perforated, burnt or generally damaged vessels seem to have been quite commonly used. The majority of pits seem to have been only large enough to contain the generally small number of objects. Accessory vessels, for example, are very conspicuous in their general paucity in terms of numbers and quality on this site; a complete lack of samian in any cremation burials is very noticeable. Other accessories are also a comparative rarity if the sheer number of burials is considered. Lids are common, as has been stated, but use of 'recycled' or under-fired tile, or broken, burnt or low quality pottery is also reasonably common. There are no noticeable patterns of placement of accessories in plan, and complex spatial arrangements primarily based on placing objects within the primary or secondary container seem to be paramount.

Overall, deposition does not seem to have been a context for much elaboration of ritual styles in the eastern cemetery of Roman London. Yet even with limited materials there would seem to have been noticeable diversity in terms of combined selection of objects for deposition beyond the 'standard' configuration of ceramic primary container, no secondary container and no accessories (CN0000).

It may be that pyre side rituals, perhaps while specialists actually carried out the work of cremation, were another context for diversity and complexity of ritual; a pre-eminence among the pottery assemblages from 'pyre debris deposits' of drinking vessels may give a clue as to part of the structure of these rites (at least in the early to

mid second century in Group C), as might the plant and animal offerings mixed with pyre material wherever it was found. Even so, a degree of uniformity is also suggested in this area from the fact that evidence from diverse deposits all seem to contribute to the same overall picture.

Chronological patterns

Some variability in types of primary containers can be noted in earlier phases, but the jar tradition seems to build in line with an overall increase in burial from the mid- to late second century. Generally, what diversity there is in accessory vessels and other accessories appears to correlate with this overall increase, but Group A, and plot 2 especially are the important foci for these qualities. There also seems to be an increase in the use of open form vessels as lids from this time. There is a noticeable increase in the loose/bagged cremation deposits in the later phases overall.

Spatial sub-groups

This analysis was carried out at two levels: Groups in terms of general areas of the cemetery, and plots within those areas.

At group level there is a noticeable increase in burials dated to phase 2c in Group A, affecting overall phasing statistics in a number of ways. This group for example contained the majority of secondary containers (especially amphorae), most of the burials with accessory vessels and all of the burials with more than one accessory vessel.

A particular group can be isolated in plot 2, where a number of amphora burials as (as well as burials with some of the more complex contents) appear to cluster, perhaps in association with structures located in this area. Both burials within tile cists both were in plot 2 (burials 333 and 297), as were both tile and mortar cists containing possible 'Brandschuttgräber' (burials 567 and 568).

Sex/age groups

Sex and age groups are as usual difficult if not impossible to define. There is also an interesting over-representation of 'possible females' in the data, as compared with 'possible males'; this may well represent a bias built into the available data, or an interpretive bias (McKinley 2000b, 266). Adults are the majority group by far in terms of age, and infant remains seem always to be associated with adults in the few 'double burials'.

If possible females are counted with probable females there would appear to be a possible correlation between the sex of the remains and the provision of burials with other accessories, especially those other than coins; however, this must remain a vague possibility without firmer evidence. Perhaps more interesting is the apparent clustering of four burials with the remains of the elderly in plot 2 with other accessories; again however such evidence must only be used with its limitations borne in mind.

Other groups

Loose/bagged burials of sorted bone form a significant and consistent minority of burials throughout. It is possible that the 35 'undefined burials' are another minority form of loose/bagged cremation burials, using unsorted bone ('Brandschuttgräber'), although many may be one off 'pyre debris deposits' or disturbed and redeposited pyre material. Some burials (scattered across the entire site) seem to have contained whole or parts of burnt animal skeletons. Whether or not these were included with cremated bone at initial deposition, or at some later date, the burials appear to form a minor pattern. Coins in burials, especially loose/bagged burials (although it is possible that the presence of a coin helped to define these deposits as such) also seem to characterise a certain 'stratum' of the profile throughout, although there are no further clues as to whether represents a minority in life, or who they might have been in terms of social status, culture, or whatever.

Adjacent tile and mortar cists containing unsorted cremated bone and pyre material (possible 'Brandschuttgräber', 567 and 568) in plot 2 might represent some form of

'intrusive' rite; three amphora burials with possible superstructures (burials 349, 368 and 399) also appear to cluster in plot 2, suggesting a very localised form of burial. In terms of accessories, burials 175, 301 and 368 of plots 2 and 3 are notable for 'doubling' of accessory vessel forms, as well as all being amphora burials. Do burials 290 and 362, both in plot 2, have some other connection in both containing unburnt flint tools mixed with the cremated bone?

Burial level diversity

In terms of single object categories only a few burials appear to 'stand out' as being significantly different from the undoubted norms of this site. In particular the alternative use of an amphora in burial 753, with a hole in the bottom of the vessel rather than the top is possibly unique (perhaps this suggests some use of already 'modified' amphorae, broken for some other reason?). At site level, the lone flagon in burial 760 makes it the only burial in plot 28 with an accessory vessel not used as lid, and burial 175 in plot 3 is unique in having as many as three accessory vessels. The tazza used as a lid in burial 675 is an interesting variation on the open forms commonly used for this purpose, and the fact that the dish inverted for use in this way in burial 362 was decorated on its base as well suggests either special selection, or even special production of the vessel with this context in mind.

It is perhaps particularly in the area of other accessories that the most compelling examples of possible specialisation of burials might be found, with mirrors, beads and hairpins being rare or unique in number and type. Burial 1092 in Group B is certainly outstanding in this respect, containing a number of specialised objects, and in particular the perforated Neronian coin and a mirror imitating the design on that coin. Even so, the noticeable diversity in terms of *combinations* of objects among a little more than half the burials analysed in this way (in phases 2a–2c especially) seems to be evidence of a more widespread degree of specialisation despite an often limited range of materials.

Site profile

The profile then seems to be fairly uniform cremation practices coupled with perhaps surprising uniformity at the deposition stage, with simple jar containing bone with lid being a very recognisable formation across most of the site (and apparently affording a number of redepositions). Somewhat limited elaboration of burials is recognisable in terms of secondary containers, accessory vessels and other accessories in line with an overall increase in burials from about the mid- second century and especially in Group A, although primary containers seem to become less diverse. In terms of other accessories, there are possible links between the gender and/or age of the deceased (female or old age). In fact, on occasion, other accessories placed within primary or secondary containers appear to be the most important medium for specialising burials. Apart from the proportion of 'standard' CN0000 profile of overall combinations of objects apparently remaining consistent throughout, there is still a distinct increase in variations on the theme in phases 2a–2c, again suggesting that increased specialisation of burials is linked to increased numbers of burials overall, especially in the latter part of the second century. It may be that further diversity in ritual actions was played out in those aspects of the mortuary sequence that have left no discernable archaeological trace.

Local profile

Once again the provenance and selectivity of earlier finds in the area (appendix 7.4) is a problem, and no synthesis has as yet tackled the details of chronology for this dataset. There is also no comparative material for looking at cremation methods in or serving the Eastern Cemetery. Recent excavations in Southwark have produced a putative '*bustum*' or pyre site (MacKinder 2000, 33–37), but this produced a different profile of pyre side ritual to the Eastern Cemetery example, with no less than at least six *tazze* (many apparently deliberately smashed and inverted) and eight ceramic lamps. A further variant can be established from environmental analyses, which showed that cremation deposits contained many stone pine nut shells, pine scales and a date, as well as charred cereal grains. Melted glass and gold (possibly from a textile) were also present, along with approximately 1.00kg of cremated bone from an adult female. The pine materials seem to mark a particularly interesting component,

apparently different from the Eastern Cemetery associated pyres (although this cannot be directly compared with the pyre site G0.36, above, as no equivalent evidence has been made available for that context), which tended to include pulses etc. Further a field it may be hoped that the Pepper Hill site at Southfleet, Kent will soon provide at least 20 such pyre contexts for comparison (Angela Boyle, *pers. comm.*).

In terms of deposition, while loose/bagged burials are again missing from earlier discoveries of material, a notable pattern of low numbers of accessory vessels and other accessories seems again to emerge. Many of the burials discovered in the past seem to have conformed to the relatively simplistic localised model of ceramic primary container (jar?), sometimes with a lid of some sort, but with no accessory vessels or other accessories. Examples in this category seem to include: a 'pottery cremation urn' discovered at Blackwall Yard, Aldgate Extension in 1882 (Hall 1996, 70; Barber and Bowsher 200, 336), a burial at 41 Canon Street Road, London discovered in 1919 (Hall 1996, 73; Barber and Bowsher 2000, 338), two burials discovered between Prescott Street and Tenter Street, London in1936 (Hall 1996, 73; Barber and Bowsher 2000, 338), a burial at 14-18, St Clare Street, London discovered in 1965 (Hall 1996, 71; Barber and Bowsher 2000, 337), and an undated discovery at Holy Trinity Church, Minories, London (Hall 1996, 70; Barber and Bowsher 200, 337).

Occasional burials seem to have some albeit minor elaboration, such as one with two accessory vessels (including samian) and a glass phial from Little Alie Street, Whitechapel in 1913 (RCHME 1928, 159; Philpott 1991; Hall 1996, 72; Barber and Bowsher 2000, 338), and another from the same find where the lone primary container apparently contained an iron brooch. Burials discovered at Haydon Square in 1797 and 1891-2 (RCHME 1928, 157; Hall 1996, 71; Barber and Bowsher 200, 337) contained glass accessory vessels (not described: phials?), and a burial from Mansell Street in 1843 also contained a glass phial (RCHME 1928, 157; Philpott 1991; Barber and Bowsher 2000, 338); another burial discovered at St. Clare Street in 1965 contained a pipe clay cockerel figurine but no further accessories are reported (Hall 1996, 71; Barber and Bowsher 2000, 337).

A pattern of either relatively few or no accessories even when secondary containers such as amphorae or tile cists had been used was also noted in the Eastern Cemetery case study (above). This pattern seems again prevalent in the background material. An amphora burial at Whitechapel (Cuming 1877, 337; Philpott 1991) contained only a primary container with bone, as did an examples from 6-13, Spital Square (Taylor 1936, 256; Philpott 1991) and Leman St./Great Prescott St., London (Taylor 1936, 213; Philpott 1991), the latter with a lid for the primary container. A further example from Great Alie St. (RCHME 1928, 159; Philpott 1991; Hall 1996, 72; Barber and Bowsher 2000, 338) only contained a ceramic primary container with a dish as a lid (note again the use of lids for primary containers despite use of secondary containers).

An amphora burial at Liverpool Street (RCHME 1928, 159; Philpott 1991) apparently only contained 'two cinerary urns', and further east at Old Ford (RCHME 1928, 164; Philpott 1991) an amphora perhaps merely housed a loose or bagged cremated bone deposit. A phase 1a amphora burial at Bank Station seems to have contained two primary containers, a jar and a bowl, but nothing else (RCHME 1928, 155; Philpott 1991), while tile cists at 6-13 Spital Square (Taylor 1936, 256; Philpott 1991) once again only contained primary containers and no accessories. A phase 2a amphora burial with a tile lid, containing a burnt jar as primary container and a copper pin found at the Co-operative Wholesale Society, Leman Street (Hall 1996, 73; Barber and Bowsher 2000, 338) can only be described as slightly elaborated, while another example from Whitechapel seems to represent the most elaborate of such finds, containing a copper alloy statuette and mirror, but apparently no accessory vessels (Hall 1996, 70; Barber and Bowsher 200, 336).

Perhaps the most interesting amphora burial recorded is one found in Mansell Street in 1843 (RCHME 1928, 157; Philpott 1991; Barber and Bowsher 2000, 338), which appears to have been modified by making a hole in its base. This seems to compare well with the modified amphora in burial 753 in plot 28 of the Eastern Cemetery (see above), which is the only other example of such modification I have encountered.

Despite the obvious drawbacks in the quantity and quality of evidence therefore, it would seem that the profile of limited numbers of accessory vessels and other

accessories thrown up by the Eastern Cemetery case study is reflected in earlier finds, reinforcing the view that this is a localised trait.

Part four: conclusions, bibliography and appendices

11. Comparative profiles and conclusions

Introduction

This chapter compares evidence from the forgoing case studies of cremation and various aspects of associated deposition. Each section moves from initial considerations of apparent uniformity at a 'general' level (aspects of ritual found in all case study areas), towards increasing diversity at a 'regional' level (aspects of ritual found only in certain case study areas), at local level (aspects of ritual found only on specific sites) and at 'burial' level (variability between individual ritual sequences). This method aims to elucidate which aspects of the ritual are to an extent governed by general 'rules', and which have allowed for regional or local tradition or particular improvisation on the part of actors. In the sections on deposition, aspects of selection, modification, combined selection and spatial features are considered in the case of various burial components. Having delineated various aspects of ritual style, the potential for multi-layering of meaning in the ritual sequence is reconsidered. ('Undefined burials' isolated in various case studies are not included in this section, and represent an area for further research, see below).

It is first necessary to acknowledge that conclusions to be drawn from this survey are obviously limited in terms of the types of cemetery sites analysed here in detail (i.e. two specific east Kent rural sites, and more or less specific cemetery areas in Canterbury, Colchester and east London), but offer considerable scope for future research over a wider area once a more extensive body of quality data become available. General features of cremation burial deposits over the entire survey area are compared with Philpott's existing wide ranging survey and 'typology', while comparison of aspects of cremation are reliant on the variable records produced by what is still a relatively new field.

For example, possible sex and age groupings are only considered in the following when sufficient evidence is available. This is because of a general finding in the

forgoing analyses that the recorded sex and age of individuals represented by cremated remains often seems to be somewhat determined by the interpretative frameworks used by different osteoarchaelogists 'in the field'.

Thus the high proportions of adult females or possible adult females at Each End, Ash, or of adult males and possible adult males at Cranmer House, or of 'young adults' (various definitions) at Abbey Field, or even of possible adult females (various definitions) from the London material, all seem more likely to reflect individual analytical biases than 'true' localised aspects of so called 'cemetery populations'. Any suggestions as to gender and/or age based qualities of cremation and/or associated deposition must therefore be offered with such caveats firmly in mind. We should perhaps reconsider for example Pearce's finding that adult males made up the majority of those cremated and deposited in the King Harry Lane, St Albans, cemetery (Pearce 1997, 178).

Chronology

The general chronology of the case studies suggests a pattern of increasing cremation and associated deposition (or of archaeologically recognisable deposition) from the mid- to late- second century to the mid- third century (east Kent cases studies: 'Phase one' overall = 42 burials; 'Phase two' overall = 91 burials; Colchester and London case studies: 'Phase one' overall = 42 burials; 'Phase two' overall = 124). (In the Colchester case studies the sites selected obviously have a particular bearing on this).

The fact that Colchester and London case studies have produced more burials in the later phases (Phases 3a–4b = 50 burials) than the east Kent examples (Phases 3a–4b = 2 burials) may well be a function of variant dating methods among specialists, but also possibly reflects extended use of cremation and associated deposition in Essex and London areas as compared with east Kent; further research of the entire region is required in order to pursue this.

Cremation and collection techniques and materials

In terms of cremation practice, all the available evidence from cremated bone deposits for cremation techniques (bone colour, levels of fragmentation of bone and other objects, possible fuel residues) seems to present a relatively uniform picture from each site. This perhaps is what might be expected of such a difficult procedure as pyre cremation, where little room for variability is afforded in order to produce the mainly off-white, mineralised bone deposits that are characteristic of most cremation burials and other pyre associated deposits.

We can certainly suggest some form of specialist pool of knowledge here, although various mechanisms for the maintenance of such knowledge can be put forward, such as the creation through increasing demand of a group of occupational specialists, or the 'passing down' of specialist knowledge within the context of extended families, or a residual 'social knowledge' (suggested by Martin Millett, *pers. comm.*), coming into play as and when required. The relative 'insecurity' of the latter may account for the occasional suggestion of either chronological or spatial variability of cremation methods at site level, as in the Crundale Limeworks case study. Overall, of course, in attempting to reconstruct particular cremations we are reliant on material that has already been 'selected' in some way through pyre and collection procedures, not to mention through post-depositional processes and variant circumstances of excavation and analysis.

The available structural and depositional evidence from probable pyre sites is also minimal, and of those considered in the survey, only one (from the London case study) had been analysed in relation to site formation processes, although detailed evidence is again not available. It is hoped that the recently excavated 'Pepper Hill' cemetery (Southfleet, Kent) will provide more useful data in this area, where 'at least twenty' pyre sites (reported as '*bustum* burials') have been located within a tightly packed, mixed rite cemetery (Boyle 2001, 9–10). Post-excavation analysis of these features is ongoing at the time of writing.

In general, it can be argued that specialised skill and practice seems to have been responsible in practically all cases considered here for the production of quantities of

'fully cremated' bone for collection and burial elsewhere. Evidence from all case studies seems to support the view that some sort of 'wholesale' collection of cremation deposits from cooled areas of the pyre was the norm, and that the majority of these selected deposits were subsequently sorted, perhaps using a gravitational method such as flotation or winnowing, as suggested by McKinley (1989, 73).

However, the Colchester material in general, as well as some burials from Kent (e.g. St. Dunstan's Terrace, Canterbury and Crundale Limeworks) and 'undefined burials' from the London sites, suggest either regional or site-level sub-grouping in this area. Most notably, there is some evidence to suggest that the Colchester burials considered in the two case studies investigated here were more likely to contain pyre material either mixed with the cremated bone deposit or un-mixed (i.e. more like 'Brandschuttgräber' of some description). The possibility of a local propensity to include pyre material in the Colchester burials is worthy of further investigation. This will require more environmental sampling of Colchester material and comparative data from elsewhere.

Re-use of pyre sites might be responsible for the fact that more than one individual is represented in cremation burial deposits in a small minority of cases (although such an interpretation also probably depends on 'accidental' inclusion of diagnostic pieces, and recognition of such by specialists from albeit sampled deposits). It might be suggested in some cases that there is an interesting combination of adult and infant or child remains. This and other combinations of individuals may represent some ritual 'connection' between individuals (perhaps relating to perceived connections 'in life') either at cremation and collection stages, or might even result from post-depositional addition of remains to existing burials (see below).

'Pyre-side rituals'

Evidence from pyre sites considered in this survey is of insufficient quantity (and in most cases of insufficient quality) to carry out comparative analyses pertaining to so called 'pyre side rituals'. However, a comparison of components included within the East London example and a similar context from Southwark did seem to indicate that the pyre may have been a context for diversity of ritual, at least in terms of apparent

'offerings' and 'pyre goods' (although a comparison of 'environmental' samples was not possible between these specific contexts), and these findings can now be tentatively compared to the 'Pepper Hill rite'. Grapes for example seem to have formed a significant part of pyre related rituals at Pepper Hill (Angela Boyle, *pers. comm.*) and it is interesting to contrast this with evidence of scattered pulses in the London material (Barber and Bowsher 2000, 69–71) and the apparent predominance of stone pine nut shells etc recorded in the Southwark pyre (MacKinder 2000, 33–37). Again, it may be hoped that the Pepper Hill cemetery might provide a much better case study for comparisons *between* such contexts at a particular site.

Examples of pyre goods and other evidence of possible pyre side ritual, derived from alternative deposits of pyre material as well as deposits within cremation burials themselves, are potentially informative. However, there is a great deal of variability in sampling methods and research circumstances for such material, not to mention the level of chance apparently involved in whether one deposit contains, for example animal remains, and another does not.

Only quite general points can be made with any degree of confidence, such as that in all case studies there was apparent (if sporadic) evidence for various animal (and occasionally plant derived) offerings of various kinds on the pyre, and all case studies also appeared to provide evidence of objects such as footwear, metal (perhaps dress accessories) or glass objects becoming mixed with pyre material in some way (either worn by the corpse on the pyre, or placed separately). The latter may be remnants of objects of other ritual use; glass 'phials' burnt on the pyre, for example, and 'fused' remnants of such objects known from earlier discoveries of Colchester burials in particular might fall into such a category. It seems significant that hobnails representing footwear in the Colchester and London case studies were only found in contexts associated with pyre material, and perhaps more properly described as 'pyre related deposits', suggesting a link between footwear and the pyre in these areas, and no deliberate deposition of intact footwear at the deposition stage (see below).

The potential for considerable diversity of objects at this stage of the ritual is demonstrated by evidence from various contexts incorporating pyre material (pyre sites, alternative deposits of pyre material, 'undefined burials' as well as more certain

cremation burials) from the Colchester and London case studies in particular, although again comparisons between isolated contexts can only really indicate that many more data must be collected in order to carry out more fruitful comparative analyses in the future.

Primary containers

Clearly the ceramic jar form is the most favoured primary container type in practically all the case studies (Crundale Limeworks is an interesting exception where there is a greater diversity overall), making up perhaps the most uniform aspect of the entire study in terms of deposition. This would seem to be evidence of a distinct tradition, seeming to flourish in line with increased numbers of burials overall in each of the urban cemeteries studied, and it would seem that a region wide generalisation is somewhat valid in this case at least. The more recent evidence considered in this survey is therefore in line with Philpott's assertion that '(B)y far the most common type of primary cinerary container in Roman Britain is the pottery jar, but other ceramic forms were occasionally used' (1991, 30). In the latter instances, flagons and flasks (often apparently modified or selected already broken in order to house cremation deposits more easily), beakers, cups and bowls were all sporadically used in a minority of the case study examples from each area (particularly in the urban examples, although again the small number of Crundale Limeworks burials were noticeably diverse in terms of primary container selection).

Jars, bowls, etc. chosen for use as primary containers seem most often to be local types, although this may not necessarily be a simple matter of selection from what is locally available. In this respect the London assemblage is especially interesting in terms of chronologically phased provenance (see Figure 3.56). Several strands of evidence in this case study led to the suggestion that ceramic primary containers were stockpiled. Provision of primary containers may have formed 'part of the service' provided by a specialist occupational group, although alternative mechanisms such as setting aside of such vessels within households, or more *ad hoc* selection are equally viable.

This could also be put forward as an alternative explanation for many of the kiln seconds or otherwise burnt or damaged vessels noted in all of the urban case studies particularly. Perhaps vessels sometimes suspected of having been 'ritually killed' (often with chipped rims, etc) had already been damaged either in production, storage or use and therefore found their way into a mortuary context by such means. Even sporadic use of forms other than jars might, at least in some cases, be a matter of primary container providers using what was currently available in a store of prospective containers. It can certainly be suggested that by association primary containers have a more obvious link with the cremated bone deposit (which, after all, seems to have been moved from pyres sites for burial elsewhere in the vast majority if not all cases) than other vessels. It may be that 'centralised' supply of such a container by cremation specialists or associates was a common practice, at least in more urban contexts, or that designated primary containers were brought to the pyre by mourners.

This might also apply to burials with loose or bagged cremation deposits (and not protected by secondary containers) which would seem to be much more visible as a result of more recent excavation methods, as these make up a significant and similar sized minority in each of the urban case studies. Such burials are also fairly evenly dispersed throughout the phases, again according with Philpott's more generalised assessment of the frequency of 'unurned burials' (1991, 47).

On the other hand, burials from the recently excavated 'Pepper Hill' cemetery at Southfleet, Kent, provide good evidence that variant local traditions can be found even in this area. Of perhaps 123 more definite cremation burials (the cemetery site seems to have been severely restricted in terms of space and much inter-cutting of burials and other deposits of pyre related material seems to have taken place), I estimate that loose/bagged burials accounted for 47 burials [= 38%] of the total figure (only loose/bagged deposits with corroborative evidence of either secondary containers, accessory vessels and/or other accessories are included in this count). This compares with 67 burials [= 54%] with probable jars and 9 burials [= 8%] with other forms of ceramic container (information from the archive was provided by Oxford Archaeological Unit and by courtesy of Union Railways (South) Limited).

Early indications therefore appear to suggest a much higher proportion of loose or bagged cremation deposits in cremation burials (with accessory vessels and/or other accessories often placed beside or on top of the cremated bone) at this site in particular, and therefore some sort of localised tradition. Moreover, the loose/bagged burials seem to belong primarily to earlier phases of the cemetery, with jars being increasingly used as primary containers over time, again in line with an overall increase in burials (Angela Boyle, *pers. comm.*). This suggests that a local feature or style of the ritual, i.e. provision of loose/bagged cremation deposits for deposition, may have gradually 'succumbed' to the broader influence of the jar tradition.

The use of more specialised pots or other containers in comparison with the 'norm' of a given site and/or of intrinsic variability, such as samian or other imports, is perhaps the most convincing evidence for deliberate improvisation on the theme of the primary container. For example, the lone bowl used at Each End, Ash, was that which had been placed in an amphora burial with further elaborations in terms of accessories, while that site also produced a burial with an imported 'honey pot' style jar as a primary container, the majority of burials there using a locally made jar form for the purpose. Deliberate modification may also mark particular diversification of primary containers, but again confident diagnosis of such actions forming part of the ritual sequence (as opposed to other causes for breakage, graffiti, etc) is an area fraught with interpretive difficulty. It is also plausible that damaged vessels, or those considered substandard for whatever reason (e.g. 'seconds'), may have been selected out of their planned context (such as food preparation), and pooled as a resource for mortuary use.

Although no glass primary containers were located within any of the case studies considered here (and are rarely found in larger urban cemeteries; Philpott 1991, 26), it might be suggested that such specialist containers represent a particular way of diversifying and elaborating burials (perhaps even a 'counter-tradition' among rural elites). Neither are any examples of 'lead ossuaria', stone vases or cists, nor 'pipe burials' etc, represented here (found in both the rural and urban settings; *ibid*, 28); these again seem to mark a specialised selection of primary containers for burials, in contravention to the apparent 'norms' of local ceramic jar (and occasionally other) forms or loose/bagged deposits.

There is no evidence in the case studies of certain types of ceramic primary container being associated with particular combinations of objects; no predictive model can be generated of the sorts of objects one might find associated with a jar as a primary container, for example, as compared with a bowl.

In the loose/bagged category of cremation deposit, however (in cases where there was no known secondary container such as an amphora), it might be argued that burials tended to have less accessories of any sort. It was noted that coins were more likely to be the only accessory in the London loose/bagged burials, for example, although there is the danger of a circular argument here, in that finds of accessories help to define loose/bagged bone deposits as 'burials' *per se*. On the other hand, such an approach helps to further define the apparent local loose/bagged cremation deposit tradition already noted in the 'Pepper Hill' case (see above), where many such burials contained between one and three accessory vessels. In the case studies considered here, only burials with ceramic primary containers, or sturdy secondary containers, were generally found to contain such numbers and types of accessories.

No general, regional, local or intra-site patterning of location of cremated bone or primary container within the pit could be discerned. A distinct lack of tradition or specialisation in this area is therefore suggested. More interesting perhaps is the complex spatial feature of cremated bone being placed or scattered both within and without a primary container. There is a distinct difficulty for such an interpretation here resulting from post-depositional disturbance and excavation techniques (the latter often disturbing the upper contexts of burials in order to locate them). All the same a possible local tradition among the Colchester burials investigated here may be suspected. No clear cases of inversion of primary containers or any other such 'intrinsic' spatial features were noted in any of the case studies.

Secondary containers

All study areas have produced a minority of burials using various forms of box or casket (or possibly wood shuttering of burial pits in some cases), amphorae, or tile cists as secondary containers. As such this would appear to be a feature taken up in a

minority of cases throughout the region. Limited numbers of such burials among the findings of this study therefore fit within Philpott's broad chronologies and spatial distributions for 'wooden cinerary containers' (Philpott 1991, 12–21), 'amphora burials' (*ibid*, 22–25) and 'ceramic tile cists' (*ibid*, 10–11). No cists made from alternative materials were found in any of the case studies here, and again this would seem to mark a particular elaboration of certain burials in a minority of cases (see Philpott 1991, 9–10). Such secondary containers were noticeably found in discrete spatial groupings in some of case studies (box burials at Turner Rise, amphora burials at Cranmer House, Crundale Limeworks and in plot 2 of the east London cemetery, tile and mortar cists also in plot 2 of the east London cemetery); in some cases, then, small scale traditions, perhaps associated with the involvement of particular families or other groups in a general tradition, can be posited.

Details of diversity of selection of wooden containers, especially boxes, is reliant on levels of preservation and recording, although 'caskets', tending to be defined by the 'decorative' qualities of as well as materials used for their fittings (Philpott 1991, 16), seem to indicate a further context for elaboration of a burial as compared with 'boxes'. 'Amphora burials' most frequently used globular (typically Dressel 20) types in all case studies where they were found. The London sites especially, however, seem to have some burials using variant types. Tiled cist types add little to the Philpott typology, although the two adjacent tile and mortar cists from plot 2 in the London cemetery are certainly divergent from the 'norm' of using *tegulae* or other ceramic building materials to form a rudimentary 'box', and are therefore apparently specialised. These were also apparently filled with loose or bagged deposits incorporating pyre material.

There is no evidence of a general pattern whereby the use of a secondary container presupposed the inclusion of either particular types of primary container, or of certain numbers and types of accessory vessels and/or other accessories. In other words, the use of a secondary container seems to have been an area of elaboration in itself and not necessarily in tandem with elaboration of other burial components. This is especially noticeable in the east London case study, where distinctively low numbers of accessory vessels and other accessories (characteristic of the site as a whole) were supplied with the amphora burials as in other burials (see below). Again, it would

seem that the putative boxes, as well as amphorae and tile cists, in the east Kent and Colchester case studies might be found among the more 'richly furnished' as well as less elaborate examples. This correlates with Philpott's finding in terms of the relationship between the use of amphorae in burials and numbers and types of accessory vessels, that '(I)n general, amphora burials display the same regional patterns of furnishing that can be seen with non-amphora burials' (*ibid*, 24).

However, Philpott's site level finding in this area in relation to burials from Ospringe, Kent, is worthy of note here. Philpott finds that while proportions of 'amphora burials and 'non-amphora groups' with either one accessory vessel type or three types are relatively similar, there are (proportionally) less amphora burials with two types of accessory vessel than the non-amphora groups (*ibid*, 23–24). Moreover, while admitting that the 'sample is too small to carry much weight…' he suggests that 'amphora burials tend to have a slightly greater variety of vessel type and a higher quality of vessels than non-amphora burials' (*ibid*, 24). Actually, we might simply suggest that such variables in numbers and types of accessory vessels are a separate matter unconnected with the use of amphorae *per se*; the more significant local feature at Ospringe would rather appear to be the larger number (proportionally) of burials that use amphorae as secondary containers. This feature in itself would therefore seem to be a distinctive site- level trait.

In terms of modification of secondary containers, again nothing can be said about poorly preserved wooden containers. The majority of the amphorae seem to have been modified in a fairly standard way, with removal of the upper part (usually just beneath neck and handles) apparently in order to allow insertion of objects. Again certain variants are possible, and amphora burials from the east London cemetery area with holes in the base for insertion of remains are known. Manufacture of tile cists occasionally involved the modification of tiles, and on other occasions seem to have been more a matter of simply using available materials, and 'seconds' can be said to have formed a common resource in the east London examples (where this level of analysis was carried out).

Spatially, the apparently deliberate design of pits in many (although not all) cases, in order to exactly fit secondary containers, has been noted, and again no patterning in

terms of location of such objects within larger pits has been discernable, suggesting that wider spatial references (e.g. cosmological) were not expressed in this way. Beyond this, the most significant spatial aspect again appears to be the complex relationship between this object class and other objects within the burial; this is certainly an area for diversity between burials, and in some cases, even on the same site (or, in the case of Crundale Limeworks amphora burials, in adjacent deposits), all objects were placed within the secondary container in some burials, while in others most or all objects had been placed outside.

Accessory vessels

At site assemblage level, a proportional count of types of accessory vessel often seems to conform broadly with Philpott's suggestion of flagon/flask, cup/beaker and dish forms being most commonly used in cremation burials, followed by other types in increasing minority. However, this general statement has been found to mask considerable diversity at burial level, where the selection of types and of numbers of accessory vessels is remarkably varied from burial to burial. Some apparent local patterns can be discerned in terms of particular types within vessel categories, such as the use of samian dishes at Each End, as compared with local forms of dish in broadly contemporary burials at Cranmer House and St Dunstan's Terrace, or low levels of samian being a feature of all the urban case studies (London being the most extreme example) as compared with the two rural case studies considered here (Each End and Crundale Limeworks). But it would appear that the numbers and combinations of accessory vessels selected for deposition, including the 'doubling' of vessel forms and the use only of 'special' types, marks one of the most important contexts for burial level diversity.

As such, the findings of this research highlight the need to modify any generalisations based on Philpott's much cited assertion that:

> '(A)t least by the 2nd century, there is a distinct preference in the south east of England for grave groups consisting of three or four vessels of different forms, a jar to act as a cinerary urn, a flagon, a beaker or cup, and platter or bowl…[and therefore that]…recurrence of such groups suggests a

> persistent and widespread belief that this represents an appropriate level of furnishing for the deceased' (1991, 35).

This is not only reductive in terms of primary containers, but homogenises a much more diverse practice in relation to the numbers, types and combinations of accessory vessels apparently considered 'appropriate' for specific burials.

An alternative general chronological patterning of accessory vessel provision *can* be suggested however, on the basis of the urban case studies considered here (Canterbury, Colchester and east London, the latter within the local profile of less accessory vessels in general) in line with increasing numbers of burials overall in the second and early third centuries. The pattern (even where separate sites are used chronologically, as in the Colchester case studies) seems to be of a consistent 'group' (increasing proportionally with increasing numbers of burials) with no accessory vessels, and another concurrent 'group' (again increasing in line with increased numbers of burials) of burials supplied with diverse numbers and types of accessory vessel. Some correlation of such 'groups' with divisions among the living might be suggested, such as gender based or other social factors, although further and higher quality data are required in future if such subjects are to be even broached confidently.

The sporadic use of 'substandard' vessels, such as wasters, is also noted in all the urban case studies, as is the provision of apparently damaged objects. Whether the latter reflect deliberate modification of objects as part of the ritual, or whether such objects were already singled out for mortuary ritual on the basis of pre-existing condition still remains opaque.

In terms of spatial features, no convincing patterning of accessory vessels in burials in relation to points of the compass (and therefore possible cosmological or other general spatial referents) is discernable in any burial in any of the case studies. Such location does not appear to have been a consideration in placement of accessory vessels in burials.

On the other hand, complex spatial relationships between objects, such as placement side by side of the same sort of vessel, stacking of vessels, placement (often of miniature or small vessels) within the primary container, as well as intrinsic spatial features such as inversion of certain vessels, seem to be a further dimension for considerable diversity between burials at all sites investigated; no general, regional or local tradition of vessel placement can be delineated.

Other accessories

Provision of other accessories is in the main an area for considerable diversity at burial level (indeed the definition 'other accessories' is an attempt to account for this). Some types within this category appear commonly enough for local and even regional patterns to be suggested (although 'general' patterns are not as apparent). In other cases, objects are so unique in terms of the type of object and/or any further special qualities or modification as to more strongly suggest some sort of personal connection between the object and the deceased (such as ownership), or even deliberate 'personalisation' of the burial in some way.

Among the more general classes of other accessory is footwear placed intact in the burial. The finding of this research is that distribution of this practice can be much more sharply defined than has previously been suggested. For instance, the broad view taken by Philpott produced a distribution of cremation burials with footwear as 'heavily concentrated in south eastern England' (Philpott 1991, 165). Yet neither Colchester nor the east London case studies, nor any of the background material relating to these areas (see Philpott's own data), produced any convincing examples of footwear having been placed intact in the burial at the deposition stage. Indeed, the only examples seemed to be 'scatters' of hobnails, associated with pyre material, suggesting an association of this type of object rather with the pyre than the 'grave' in these areas.

The Canterbury and east Kent case studies on the other hand produced convincing evidence of a traditional practice of deposition. The Canterbury examples could be demonstrated as a particular 'site level' tradition (counting Cranmer House and St. Dunstan's Terrace as the same cemetery area), apparently afforded to a particular sub-

group of burials that rose in numbers in proportion with increasing overall numbers of burials in the second and early third centuries. It can perhaps now be argued that a more focussed research suggests that provision of footwear is a phenomenon more associated with latter day areas of Kent, Sussex and Hertfordshire, than with either London or Colchester (indeed, only occasional examples are known from the rest of southern Essex, see Philpott, 1991, Figure 11).

The inclusion of certain other types of object in cremation burials (such as brooches, bracelets, coins, lamps and mirrors) tends also to be considered by Philpott from the broad perspectives of regionality and overall chronology, and sometimes such objects are grouped be Philpott under more general headings such as 'personal ornaments', 'pendants, gems and amulets' etc. Such categories appear at least to produce some significant regional distributions (such as concentrated distributions of 'personal ornaments' in cremation burials in the south east of England and in York, see Philpott 1991, Figure 10), but are once again bound to homogenise contemporaneous diversity at site and burial level. This in itself poses the interesting question as to whether objects for each burial were selected with reference to personal, local, regional or wider associations, or, for that matter, combinations of such associations (an aspect of multivocality of symbolic objects, surely, see below).

It could be argued that sporadic finds in various case studies of objects such as mirrors, lamps, brooches and other dress accessories in cremation burials appear to fit within the broad regional and chronological traditions in the south-east of England noted by Philpott (*ibid*), yet how such large scale distributions articulate with site-level traditions or specific ritual sequences is as yet unclear. Certainly local sub-groups or minor traditions such as the inclusion of coins in certain burials can be delineated in the urban case studies, suggesting a minority adherence to a wider tradition across the entire survey area.

In the east London case study, if provisional diagnoses of sex of cremated remains were to be accepted, we might even argue for a possible gender and/or age based provision of other accessories in favour of elderly females (although whether such a division was limited to a particular case study will remain unknowable without more high quality and compatible data). A most interesting possibility of a localised, family

or even priestly tradition is that of the pipe clay goddess figurines found on three separate occasions in the St. Dunstan's cemetery area (although pipe clay figurines have been noted in cremation and inhumation burials elsewhere there may be other reasons for suspecting a site- specific profile here).

Some of the 'other accessories' that perhaps most convincingly belong to wider, if sporadic 'traditions', would seem to be footwear, coins and lamps. The suggestion here is often that there is a reference through such objects to either 'native' or 'Romanised' after-life beliefs (see Black 1986, or Philpott 1991, 220, for example). But this is a generalised and deterministic view, failing to account for the various associations an object might have even during the same ritual sequence (multivocality again), let alone in burials perhaps a hundred miles and a hundred years apart.

Moreover, a regional and broadly chronological approach to specific artefact types cannot account for diverse combinations of object types, repetitions of object types within the same burials, or extremely rare objects. A good number of burials (from all case studies) contain variations of these 'themes', and it would seem that here is the ultimate context for diversifying, specialising and (as suggested above) perhaps even 'personalising' burials. The fascinating burial 1092 from West Tenter Street, London containing five perhaps highly personalised items (including two mirrors [one apparently 'pidginised' in design], two coins [one modified as possible amulet] and a glass ring), at least some of which may have been of some age when deposited, is an excellent example, as are amphora burials from Crundale Limeworks (10+ other accessories including an imported copper alloy box with inscription) and Cranmer House (including miniature sword in wooden scabbard). It is difficult to avoid the suggestion that such objects may have had some personal resonance with the deceased.

A further area of specialisation is the modification of such objects. Again, it must be reiterated that it is a matter of interpretation to suggest that modification occurred as part of the ritual sequence. However, the fact that each of the goddess figurines found in each of the various St. Dunstan's burial contexts seems at least to have been 'beheaded' (and may also have had the feet removed) is perhaps suggestive of a very particular tradition.

In terms of spatial features, there is again no evidence from the case studies of any reference to north, south, east or west in terms of positioning of other accessories in the burial pit. It is complex spatial relationships between objects that seem to have been more important. A particularly interesting example of this is the placement of other accessories within the primary container, either on top of or 'mixed' in some way with the cremated bone (a diverse variant was noted in one of the St. Dunstan's burials of placement of a pewter dish within the primary container and the bone deposit on top of that). Examples of this practice have been found in varying numbers in each of the study areas, and it might be suggested that there is again an element of 'personalisation' of burials in it, but through a more generalised and perhaps ritually 'logical' practice. The deliberate spatial association of certain objects (perhaps of personal resonance to the deceased and/or 'mourner') with the cremated bone deposit itself may be symbolic. This spatial association might also be a function of post-depositional revisiting, or 'secondary rites' focussing on the cremation deposit (see below).

A local spatial feature would certainly seem to be apparent in the repeated placement of footwear either side of the primary container at both the St. Dunstan's sites (as well as overlapping of footwear). Such positioning, noted by Philpott when only the Cranmer House material was available (1991, 166) and reiterated by the more recent St. Dunstan's Terrace results, is not seen elsewhere in Kent, although sporadic examples further a field have been noted (as at Skeleton Green, see Black 1986, Fig. 4). 'Intrinsic' spatial features have not become apparent to the same degree in the research, and are perhaps less likely to feature in this area, as many other accessories (such as dress accessories) do not have a diagnostic 'right way up'; it might be interesting, however, should sufficient data become available, to compare placement of coinage in burials in this regard.

Post-depositional or secondary rites, and redeposition

Overall, evidence for post-depositional activity including possible 'secondary rites' and redeposition has been found to be of insufficient quality to make generalised statements. This is mainly due to the fact that upper contexts of burials (and by

implication other features) are often 'neglected' during excavation in the process of locating burials. This situation is unlikely to be much improved upon in the current climate and methodology of developer funded excavations, where meticulous study of all deposits and features is hardly encouraged, open areas are frequently planed to 'natural' prior to systematic excavation, and contents of burials are still seen to be of greater significance than 'backfill' deposits or ephemeral traces of possible burial markers, wooden lids or controlled disturbance that might indicate continued 'use' of a burial site.

Despite such problems, the evidence from this study suggests in many cases a continuing spatial respect for burials, and provides some occasional evidence for burial markers. Further evidence for revisiting or at least planned reviewing of burials can be suggested by the use of the many and various types of lids for both primary and secondary containers in all case studies (types of objects used as lids seem to be another area allowing for considerable diversity between burials). In the east London case study it was noted in the report that lids (more often inverted open form ceramic vessels in this case) were used even when secondary containers were themselves 'lidded'. This is perhaps more promising evidence for a symbolic component of the practice, but we cannot simply assume that remains were lidded in order to 'protect' the cremation deposit either during the backfilling of a burial (if such a deliberate act did indeed occur in all cases) or in perpetuity, and for no other reason. Perhaps the most 'practical' interpretation for the use of lids is that cremated bone was being protected until such time as it was revisited by the living.

Revisiting of remains can also be suggested by adopting a more 'forensic' attitude to the 'behavioural evidence' implied by certain qualities of burial contents. An example of the alternative view afforded by such an approach is the broken rim of the glass beaker in one of the St. Dunstan's, Canterbury burials, which was found beneath the opposite side of the probable wooden cover of the burial from the vessel whence it originally derived, suggesting breakage or movement of the vessel as a result of revisiting of the burial. Another example of this type of approach is the suggestion that burnt bone representing complete or articulating parts of chicken or pigs found in a number of the east London cremation burials might represent secondary rites. The

latter suggestion can be made on the basis that articulation of cremated bone is unlikely given pyre conditions and the necessary turbulence of pyre cremation.

The idea that cremation burials need not necessarily result from a single act of burial (this, after all, is a rather anachronistic or 'ethnocentric' assumption) might have considerable implications for understanding of such features, both from the point of view of ritual and, dramatically, in terms of chronology. In the first case, objects including small accessory vessels or other accessories (or possible burnt offerings) found on top of cremated remains within the primary container may have had a specific role in secondary rites of some sort, such as the pouring of libations, washing of remains, offerings or commemorations. Secondly, in the area of chronology, the current system of dating cremation burials is based on the assumption of contemporaneity of objects within the same context; if this assumption were to be challenged then substantial rethinking of chronology would be required, calling many current views of 'trends in burial practice' into question.

Further assumptions concerning what we might call 'temporal features' of ritual might also be challenged if the significant number of apparently 'redeposited' burials, particularly noted in the east London case studies, are taken into account. The evidence usually cited for such was that jars used as primary containers were dated much earlier than the stratigraphic context into which they had apparently been inserted. While it is possible that the latter might be identifiable as an 'archaeological bias' in a particular area (the suggestion of redeposited burials was made by Whytehead in the original 1986 report on the West Tenter Street site, and may have become a 'self fulfilling prophecy' for later excavators and/or interpreters), it would seem much more likely that a true local tradition is represented here.

The 'practical' solution is that this is evidence of a localised tradition of redeposition of remains disturbed through subsequent activity. On the other hand, cremation deposits (and their primary containers) might have been stored or buried for many years elsewhere prior to being buried where they are eventually found. This would also suggest an alternative interpretation of the apparent age of many of the jars used primary containers on the east London sites; rather than the stockpiling of would-be ceramic primary containers, the same evidence allows either for considerable time

lapse between cremation and deposition, or might even challenge the contemporaneity of deposition of primary containers and of associated accessory vessels or other accessories.

Combined selection

Whether contemporaneously deposited or not, the combined objects found within each burial can be seen to represent a particular ritual sequence or focus over time. An overview of the combined objects within each burial has been compared as part of this research through codification of objects. The codification system was diagnostic and dealt only in types of object found in combination in burials, with no consideration of cremation and collection, and no comparison of special qualities of deposited objects, modification or spatial features. Despite the admittedly small sample of burials where entire contents could be confidently established, a very interesting overall pattern emerges as a potential hypothesis for further research.

Of a total of 247 burials from all case studies and all phases that could be subjected to such analysis (not redeposited and all components known), no less than 111 'types' could be distinguished; in other words, the vast majority of object groups within burials in this survey, when considered as a whole, were diverse in at least one aspect. It is notable that the largest single group were the relatively 'simplistic' burials containing cremated bone in a ceramic primary container with no secondary container and no accessories of any kind (82 burials with the code 'CN0000' = 33% of the sample), and, as we might expect, that the majority of diversifications were in the area of accessory vessel and/or other accessory combinations.

A general phasing of this data on the basis of most likely centuries for burials (phases 1a, 1b, 1c and 1d = phase 1, etc) produces a further interesting finding in the shape of a general chronological pattern of development in this area. It would seem that, as numbers of burials increased overall in the second to third centuries in all urban case studies considered here (225 burials subjected to this analysis), so did the proportion of burials with diverse combinations of objects, while a lesser 'group' of burials apparently merely containing a ceramic primary container and no accessories (only partially augmented if more certain burials with loose/bagged cremation deposits and

no accessories are included) remained significant but gradually decreased in favour of the more diverse profiles. An overall phasing can therefore be suggested, an increasing general tradition of diversity of combined selection of objects in burials in the second and early third centuries, in line with increased numbers of burials overall, while a substantial but dwindling minority were afforded no elaboration in the form of secondary containers, or accessories or any kind (see Table 4.10). Further elaborations in the form of complex spatial relationships, more specialised selection, and modification of objects would add further detail picture of an increasingly diverse tradition.

Phase	Number of burials in area case studies	Total number of burials	Number of 'CN0000' burials	Number of burials of diverse types
1	Canterbury = 29 Colchester = 13 East London = 15	57	24 (42%)	33 (29 types) (48%)
2	Canterbury = 51 Colchester = 29 East London = 59	139	50 (36%)	89 (60 types) (64%)
3 and 4	Canterbury = 0 Colchester = 11 East London = 14	25	6 (24%)	19 (17 types) (76%)

Figure 4.10: phased combined selection types in urban case studies

Interpretation of styles and meanings

Levels of Style

The question as to exactly how these general groups of relatively simple and of more elaborate burials articulate with groups among the living is an area requiring both more and better data for further research. Interpretation is also of course a matter of theoretical standpoint (see below), yet the evidential starting point for interpretation (for depositional rites at least) would appear to be that while an overall 'structure' suggesting *potential* types and uses of objects in cremation and associated deposition can be deduced from the collected evidence, so too can 'agency' on the part of actors in each ritual sequence, through improvisation on the general themes.

To use a linguistic analogy (although I refrain from adopting a linguistic approach to materiality in terms of *meaning*), we might suggest an overall 'vocabulary' and 'grammar', denoting the commonly expected types and uses of types of objects within cremation burials. Such structures perhaps equate with the general 'form', or the 'rule governed behaviour' (Parkin 1992) of the given type of ritual, or equally might be understood as the underlying 'structure' or 'framework' denoting potential ritual objects and actions.

This overall framework for ritual would include such general factors as accepted modes of cremation and collection of human remains (although the inherent difficultly in this practice must to a certain extent limit variation on the 'theme' and would probably consign such work as the province of specialists, whether these be occupational, family or otherwise), as well as deposition within primary containers that are more often than not ceramic, and most often local jar forms, frequently associated with accessory vessels such as flagons or flasks, beakers or cups, dishes or bowls. Also (and perhaps increasingly), such 'rules' might allow for diverse accessories beyond the traditional food and drink vessels, or of diverse combinations and placement of objects overall.

It is identification of such generalised aspects that has led to generalising statements such as Philpott's suggestion in terms of accessory vessels of a 'distinct preference in the south east of England for grave groups consisting of three or four vessels of different forms...[etc]' (1991, 25). But the overall 'vocabulary', 'grammar' or 'structure' of a given ritual type should not be allowed to overshadow general, regional, local or site level traditions, or the diverse ways in which these aspects are articulated by actors within particular ritual sequences.

What seems to emerge from the findings of this survey is the possible development of new style of mortuary ritual in south-east England in the first to early fourth centuries, through what we might compare to a 'dialectic' between 'structure' and 'agents' (see Dobres and Robb 2000, 3–17), wherein diversity of burial contents especially was increasingly an area for improvisation. Certainly the findings show that, rather than a homogenised practice, Romano-British cremation and associated deposition in south-east England represents a fascinating blend of developing tradition and innovation.

Levels of Meaning

A more 'fine grained' analysis therefore delineates various styles of Roman period cremation and associated deposition. With reference to the approach to 'meaning' as outlined in Chapter 1, the latter throws open an interesting array of potential overlapping meanings embodied by each ritual sequence, ranging from general to local to more specific referents. First and foremost, the results of the analysis seem to indicate an increasing participation in cremation associated burials as part of a response to death across the entire survey area.

Perhaps the installation of a cremation burial in itself came to be perceived as a sign of 'Roman-ness', even as that definition was itself constructed and reconstructed over time. In a general tradition of cremation and associated deposition, developing over some 250 years at least, we might posit the concurrent development of an implicit understanding of 'the correct thing to do', equating with what Parkin terms 'rule governed behaviour'(1992), in this case increasingly deployed as a statement of what we might call 'middle class' pretensions, perhaps invoking elite fashions (among other nuances) in the minds of original ritual actors.

The general types of materials used, especially ceramic primary containers and accessory vessels, also suggest some commonality of meaning for this overall form of ritual in terms of associations with food and drink preparation and/or consumption, perhaps related once again to a 'Romanized' or rather 'creolized' understanding of the rite. It would seem that particular forms of food or drink associated vessel were selected out of the 'lived' context for use in the mortuary context (we might wonder how such connotations were reflected in the 'everyday' use of such items). Certain vessels may even have suggested themselves through certain qualities such as damage or malfunction, such objects perhaps being thought to be 'apt' for the mortuary context by virtue of their perceived 'otherness'.

Beyond this level, the establishment of the reasons why a certain (apparently increasing) general 'group' of burials were provided with increasingly diverse objects, while another 'group' were apparently not (remembering the caveat of differential survival of various materials) presents a very interesting problem. We might suggest a number of (not necessarily mutually exclusive) solutions.

'Classical' ideas may have exerted an influence on afterlife beliefs as a result of cultural contact, and indeed might appear to have had an impact on some cremations (perhaps in terms of ritualised use of certain types of food such as dates, pulses, pine nuts, grapes etc) and some burials (perhaps through objects such as lamps, coins, statuettes being deposited). Whether such evidence points to the adoption of belief systems, however, or just an adaptation of ritual actions and objects is a matter for further debate. Alternatively, the apparently sporadic use/deposition of such objects might have acknowledged or promoted a perceived 'Roman-ness' of the deceased in life, or might reflect personal possession of these kinds of objects. From a sociological perspective, all such ideas may have co-existed within, and to an extent have informed, competitive emulation of elite funerary customs through the development of the 'middle class' mortuary practice suggested above, perhaps generated and maintained by extended families of a certain status.

In tandem with such macroscopic ideas, we should take more account of the impact of local traditions and therefore local frames of reference in terms of 'meaning'. The

apparently formative loose/bagged cremation deposit tradition at Pepper Hill (Angela Boyle, *pers. comm.*), the generally low numbers of accessory vessels in the east London cemetery, the particular treatment of footwear in the St. Dunstan's cemetery sites at Canterbury, and the apparent absence of providing footwear at the deposition stage of Colchester and London ritual sequences, for example, all provide evidence that local traditions of meaning may also have informed a potential complex of meaning for each ritual sequence. Furthermore, such 'traditions' may themselves have been informed to some extent by, or rather have been an expression or representation of perceived qualities of the individual in life, such as gender, social standing, or occupation (again these need not be mutually exclusive).

Yet what a detailed analysis comparing individual ritual sequences shows most clearly is an increasing propensity for diverse treatment of *each burial* in terms of combinations, numbers and types of objects as well as their treatment and placement. Possibly this relates to a more *ad hoc* 'model' for burial contents, dependant on various ritual participants bringing the 'right sort of thing' to the burial pit (cf. Millett 1993, 267, relating numbers of vessels in the burial pit to social links of the deceased in life). Such an arrangement would certainly provide a context for improvisation on a general theme, as would ritual formulae based on extended family ties, or numbers of siblings or dependants, for example.

Alternatively burial diversity may in some cases at least relate to revisiting and continued manipulations (adding and removing) of burial contents. At a basic human level, it should finally be recognised certain burials in all case studies contain objects that are strongly suggestive of some sort of personal association of those objects with the deceased, and therefore seem to be commemorative of personal relationships between the deceased and mourners.

It is interesting to note therefore that, apparently despite an increasingly conventional holocaust of cremation for the dead in Roman period south-east England, and a general 'pattern' for cremation burial among certain groups, the place of burial may have developed as a context for (perhaps ultimate, perhaps ongoing) objectification of the subject through materiality (Gardner 2003), and the construction of a kind of personhood in death.

Proposals for further research

The quality of results produced by methods used in this research is promising, yet several areas of further refinement can be suggested. One distinct issue that needs to be addressed is that of compatibility of data between different case studies. In order to develop this, more transparency in terms of interpretive methods used by specialists and compatibility of datasets and diagnostic features will be required (although the often competitive climate of developer funded archaeology, as well as academic notions of 'intellectual property' might prove to be obstacles here). Nonetheless, a greater consensus in terms of dating of both individual objects and assemblages, diagnostic features of 'deliberate breakage' of objects including human remains, diagnostic features of sex and age and treatment of human remains, for example, might aid progress towards a better understanding this area of Romano-British existence. Certainly more heuristic activity such as ethnographic (perhaps participant) observation and experimental archaeology might be undertaken, especially in the area of cremation and bone collection techniques. A specific area of interest here, for example, would be the ways in which trauma to bones and other objects on the pyre as a result of 'maintenance' might be diagnosed.

In terms of collection and deposition, 'undefined burials' that include pyre material, such as those noted in this survey at recently excavated sites like St Dunstan's Terrace, Canterbury, and Turner Rise and Abbey Field, Colchester, as well as at some of the more recently excavated London sites, would benefit from a good deal more scrutiny. Not enough is known about the 'typology', morphology and structure of these deposits, as they seem in the past to have been ignored or neglected, often perhaps being categorized as disturbed material. A systematic and comparative research involving the various components and categories of evidence is required.

A more detailed and extensive survey of the general background data from older sources as well as sites falling between current study areas would probably serve to clarify regional, local, site level and burial level diversity identified here, and reconstruction of certain details that have remained unpublished in syntheses (such as spatial features of burials) using primary source materials might also be possible.

Further codification of cremation related deposits represents one avenue whereby the analytical instrument devised and tested as part of this research might be modified; in particular, some account of variant cremation deposits (in terms of the inclusion or not of pyre material), spatial features, modification of objects, and lids or markers for burials might serve to further define areas of diversity and uniformity. Such codification might also be tested for use in multivariate statistical methods of accounting for variability, such as correspondence analysis. Refinement of the chronological system developed here might also be attempted; in this area also, the alternative approaches to proposed 'secondary rites' and redeposition thrown up by this research represent a further research question in themselves, and may have far reaching implications in terms of contemporaneity of deposition and chronology in general.

Codification of burials and database profiling of various features of specific ritual sequences would be ideally used to generate relational site-level and regional Geographic Information Systems; such instruments would help to delineate site level groups, trends and developments as well as wider scales of reference at local and regional level.

Finally, while the general survey might be usefully extended to incorporate wider areas of Britain in order to develop a deeper understanding of the articulation of insular profiles, comparison with sites on the near continent would appear to be a particularly interesting and original prospect.

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Appendices: case study data and sites gazetteer

Notes to appendices: abbreviations used in figures and tables

a) Phasing

Earliest	Latest	Phase
'0'	100	1a
50	150	1b
50	150–250	1c
50	>250	1d
100	200	2a
150	250	2b
150	250–350	2c
150	>350	2d
200	300	3a
250	350	3b
250	>350	3c
300	400	4a
350	>400	4b

b) Sex and age of human remains

Age	Sex	Codification
Unknown	Unknown	u
Infant	Unknown	iu
Child	Unknown	cu
Young adult	Unknown	yau
Young adult	Female	yaf
Young adult	Possible female	yafp
Young adult	Male	yam
Young adult	Possible male	yamp
Adult	Unknown	au
Adult	Male	am
Adult	Possible male	amp
Adult	Female	af
Adult	Possible female	afp
Older adult	Unknown	ou
Older adult	Female	of
Older adult	Possible female	ofp
Older adult	Male	om
Older adult	Possible male	omp

c) Simplified codification of combined selection

Stage	Burial component	Variable
1	Primary container	N = none (no cremated bone) L = loose/bagged G = glass C = ceramic U = unknown
2	Secondary container	N = none W = wood A = amphora T = tile cist U = unknown
3	Number of accessory vessels	'00' = none Or number of accessory vessels
4	Types of accessory vessels *in order* (also used for comparison of accessory vessel combinations)	F = flagon, flask or other pouring vessel C = cup, beaker or other drinking vessel D = dish, platter, etc B = bowl J = jar S = 'special' (e.g. miniatures, etc.) U = unknown
5	Number of other accessories	'00' = none Or numbers of other accessories
6	Types of other accessories in order	F = footwear (counted as one object) G = glass vessel L = lamp B = brooch M = mirror C = coin S = 'special' meaning any other types U = unknown

NA= codification not possible as components obviously missing

d) Spatial features

Location in pit in relation to pit centre if cremated bone, in relation to cremated bone if another object:

(compass points: n= north, e= east, s= south, w= west, ne= north east, se = south east, sw = south west, nw= north west, and c = central)

Intrinsic spatial features:

(i=inverted, up=upright, t=tilted, s=side, u=unknown)

e) Material and other qualities

Material:

ag =silver, b =bone, bo =worked bone, c =ceramic, cb =ceramic/with cremated human bone, cbm = ceramic building material, co = ceramic (other), cu =copper alloy, fe=iron, g =glass, l =leather, m = unknown metal, pe = pewter, ps = worked stone, s =shell, sam =samian, samcb =samian containing cremated bone, st =stone, w =wood

W = wooden secondary container, A = amphora, T = tile cist. (Field also includes deposits and cuts).

Provenance:

import =imported, c. gaul =samian from central Gaul, s. gaul = samian from southern Gaul, e. gaul = samian from east Gaul, special = specialised object (alternative provenance suggested, e.g. made especially for ritual purpose), VW= Verulamium White ware, TK= Thameside Kent ware, AH= Alice Holt ware, K= Kent product, BH= Brockley Hill ware, NV= Nene Valley product, NV/COL/OX= Nene Valley, Colchester or Oxfordshire product, AH/F= Alice Holt/Farnham ware.

Note: Full contextual information (such as context or small find numbers) for the following tables was not always available and could not be reconstructed.

1. Each End, Ash, Near Sandwich, Kent

1.0 Each End, Ash: general information

Phase	Spatial Sub group	Burial	Sex/age	Codification
2a	n	21	d	NA
2b	n	22	u	NW3FCD00
2b	n	23	au	CN2FC00
2b	n	24	au	CN4FCD00
2b	s	5	u	NN0000
2b	s	10	af	LW0000
2b	se	4	au	CN9FCDBJ1F
2b	se	13	af	CN0000
2b	se	14	af	CN1C00
2b	se	15	afp	CN2DJ00
2b	se	16	au	CN3FCD00
2b	se	17	au	CN3FCD00
2b	se	18	yafp	CA2FC1G
2b	se	19	au	CN2FB2FL
2b	se	26	af	CN3FCB00

1.1 Each End, Ash: cremated bone

Phase	Spatial sub group	Burial	Sex/age	Skeletal elements	Weight in grams.	Primary container	Location in pit	Context
2b	N	23	au	Unknown	494	jar	nw	c.146
2b	N	24	au	Unknown	92	jar	se	c.141
2b	S	10	af	34/13/12/41	1234	loose/bag?	c	c.231
2b	Se	4	au	14/18/18/50	1385	jar	nw	c.261
2b	Se	13	af	18/36/18/28	1537	jar	c	c.44
2b	Se	14	af	27/27/18/28	1108	jar	se	c.79
2b	Se	15	afp	24/23/19/34	1065	jar	sw	c.40
2b	Se	16	au	41/06/19/34	642	jar	n	c.50
2b	Se	17	au	13/28/34/25	218	jar	e	c.71
2b	Se	18	yafp	10/38/18/34	1959	bowl	c	c.34
2b	Se	19	au	21/10/18/51	1060	jar	sw	c.88
2b	Se	26	af	20/22/18/40	859	jar	u	c.472

1.2 Each End, Ash: other possible pyre material

Phase	Spatial sub group	Burial	Sex/age	Type	Material	Context
2b	n	24	au	nails	fe	c.141
2b	se	13	af	frag	fe	c.44
2b	se	18	yafp	pig	b	c.34
2b	se	17	au	nails	fe	c.71
2b	se	16	au	nails	fe	c.50

2b	se	16	au	pig	b	c.50
2b	se	19	au	pig	b	c.88
2b	s	10	af	pig	b	c.231
2b	s	10	af	bird	b	c.231
2b	se	14	af	pig	b	c.79

1.3 Each End, Ash: ceramic primary containers

Phase	Spatial sub group	Burial	Sex/age	Type	Provenance	Context
2b	n	23	au	jar		c.148
2b	n	24	au	jar		c.142
2b	se	4	au	jar		c.260
2b	se	13	af	jar		c.43
2b	se	14	af	jar		c.78
2b	se	15	afp	jar	import	c.37
2b	se	16	au	jar		c.47
2b	se	17	au	jar		c.70
2b	se	18	yafp	bowl		c.30
2b	se	19	au	jar		c.87
2b	se	26	af	jar		c.471

1.4 Each End, Ash: secondary containers

Phase	Spatial sub group	Burial	Material	Type	Vertical position	Location in pit	Context
2b	N	22	u	W and cu?	casket?	u	u	c.164
2b	S	10	af	W	Box	up	c	c.231
2b	Se	18	yafp	A	amphora	up	c	c.23

1.5 Each End, Ash: accessory vessels

Phase	Spatial sub group	Burial	Material	Type	Quality	Provenance	Location	Context
2b	N	22	c	beaker			u	c.165
2b	N	22	c	flagon			nw	c.162
2b	N	22	sam	dish		c.gaul	nw	c.161
2b	N	23	c	flask		special?	se	c.150
2b	N	23	sam	cup		c.gaul	s	c.149
2b	N	24	c	beaker			ne	c.143
2b	N	24	c	flagon			nw	c.144
2b	N	24	sam	cup		c.gaul	u	c.469
2b	N	24	sam	dish		c.gaul	u	c.470
2b	Se	4	c	beaker		import?	se	c.265
2b	Se	4	c	bowl			se	c.268

2b	Se	4	c	flagon		se	c.271	
2b	Se	4	c	beaker	import?	nw	c.277	
2b	Se	4	c	flagon		se	c.273	
2b	Se	4	c	jar		se	c.262	
2b	Se	4	sam	cup	c.gaul	se	c.270	
2b	Se	4	sam	dish	c.gaul	se	c.267	
2b	Se	4	sam	dish	c.gaul	se	c.269	
2b	Se	14	c	beaker		e	c.80	
2b	Se	15	c	jar		se	c.38	
2b	Se	15	sam	dish	c.gaul	ne	c.39	
2b	Se	16	c	flagon		e	c.48	
2b	Se	16	c	beaker		se	c.83	
2b	Se	16	sam	dish	c.gaul	sw	c.49	
2b	Se	17	c	beaker		n	c.73	
2b	Se	17	c	flagon		sw	c.68	
2b	Se	17	sam	dish	e.gaul	nw	c.72	
2b	Se	18	c	flagon		se	c.31	
2b	Se	18	sam	bowl	c.gaul	s	c.32	
2b	Se	19	c	flagon		se	c.89	
2b	Se	19	sam	bowl	c.gaul	ne	c.91	
2b	Se	26	c	flask		u	c.473	
2b	Se	26	c	beaker		u	c.476	
2b	Se	26	sam	bowl	c.gaul	u	c.475	

1.6 Each End, Ash: other accessories

Phase	Spatial sub group	Burial	Sex/age	Type	Material	Location	Context	Small find No.
2b	n	23	au	hobnails	fe	m	c.146	1679
2b	se	4	au	hobnails	fe	se	c.278	634
2b	se	18	yafp	hobnails	fe	m	c.34	1678/82
2b	se	18	yafp	goblet	g	sw	c.33	581
2b	se	19	au	hobnails	fe	ne	c.86	228/231
2b	se	19	au	lamp	co	e	c.92	

1.7 Each End, Ash: other contexts

Phase	Spatial sub group	Burial	Sex/age	Type	Material	Location in pit
2b	se	4	au	bedding deposit	deposit	
2b	se	13	af	bedding deposit	deposit	
2b	se	14	af	bedding deposit	deposit	
2b	se	15	afp	bedding deposit	deposit	
2b	se	16	au	bedding deposit	deposit	
2b	se	17	au	bedding deposit	deposit	
2b	se	18	yafp	amphora	c	lid
2b	se	18	yafp	bedding deposit	deposit	
2b	se	19	au	bedding deposit	deposit	

2. Crundale Limeworks, Crundale, near Canterbury, Kent

2.0 Crundale Limeworks: general information

Phase	Spatial sub group	Burial	Sex/age	Codification
1a	w	7	au+iu	CN4CBJ1M
1a	w	8	apfp	SN3DBJ00
1b	w	6	au+au	CN1C00
2a	e	4	cpu	CN2CD00
2a	e	5	u	CN11D00
2b	e	1	u	LA0010FBS
2b	e	2	au	LA6FCDBJ2FG
2b	e	3	amp	LA7FCDBJ5FGS

2.1 Crundale Limeworks: cremated bone and primary containers

Phase	Spatial sub group	Burial	Sex/age	Weight in Grams.	Primary container	Location in pit	Context
1a	w	7	au+iu	144	scattered?	ne	amlcrem7
1a	w	8	apfp	349	scattered?	u	none
1b	w	6	au+au	2000	jar	c	aml874407
2a	e	4	cpu	425	bowl	c	aml874405
2a	e	5	u	500	jar	sw	aml814408
2b	e	1	u	1250	loose/bag?	ne	aml874409
2b	e	2	au	950	loose/bag?	u	aml874406
2b	e	3	amp	1700	loose/bag?	u	aml99/88

2.2 Crundale Limeworks: other possible pyre material

Phase	Spatial sub group	Burial	Sex/age	Type	Material	Context
2b	e	1	u	oyster	'b'	aml874409
2b	e	1	u	metal objects	m	aml874409
2b	e	1	u	animal	b	aml874409

2.3 Crundale Limeworks: ceramic primary containers

Phase	Spatial sub Group	Burial	Sex/age	Type	Quality	Provenance	Context
1a	w	7	au+iu	cup			7c
1a	w	8	apfp	bowl	Sam/ graffito M	s.gaul	8b
1b	w	6	au+au	jar			6a
2a	e	4	cpu	bowl			4a
2a	e	5	u	jar			5a

2.4 Crundale Limeworks: secondary containers

Phase	Spatial sub group	Burial	Sex/age	Material	Type	Vertical position	Location in pit	Context
2b	e	1	u	A	amphora	up	c	1a
2b	e	2	au	A	amphora	up	c	2a
2b	e	3	amp	A	amphora	up	nw	3a

2.5 Crundale Limeworks: accessory vessels

Phase	Spatial sub group	Burial	Material	Type	Quality	Provenance	Location in pit	Context
1a	w	7	sam	bowl	graffito M	s.gaul	se	7e
1a	w	7	sam	cup		s.gaul	S	7d
1a	w	7	c	jar			sw	7b
1a	w	7	sam	bowl		s.gaul	sw	7a
1a	w	8	sam	dish	graffito M	s.gaul	u	8c
1a	w	8	c	jar			u	8a
1a	w	8	sam	bowl		s.gaul	n	8d
1b	w	6	c	cup			ne	6b
2a	e	4	c	cup			se	4c
2a	e	4	c	dog-dish			sw	4b
2a	e	5	c	dish			ne	5b
2b	e	2	c	flagon			m	2f
2b	e	2	sam	bowl		c.gaul	m	2c
2b	e	2	c	jar			m	2b
2b	e	2	sam	dish		c.gaul	m	2d
2b	e	2	c	cup	graffito X		m	2e
2b	e	3	sam	bowl		c.gaul	ne	3c
2b	e	3	sam	dish		e.gaul	ne	3d
2b	e	3	sam	cup		c.gaul	ne	3e
2b	e	3	c	beaker			ne	3f
2b	e	3	c	flagon			se	3h
2b	e	3	c	jar			nw	3g

2.6 Crundale Limeworks: other accessories

Phase	Spatial sub group	Burial	Sex/age	Type	Material	Provenance	Location in pit	Small find No.
1a	w	7	au+iu	mirror	ag	import	se	1
2b	e	1	u	nails and fitting	fe		m	various
2b	e	1	u	brooch	cu		m	49
2b	e	1	u	small box	cu	import?	m	1
2b	e	1	u	mesh rings	cu		m	4-13
2b	e	1	u	fragments	cu		m	14-15
2b	e	1	u	bead(s)	g		m	16-22
2b	e	1	u	hobnails	fe		m	18-20

2b	e	1	u	ring shaped object and *fittings*	ag		m	various
2b	e	1	u	brooch	cu	import?	m	16
2b	e	2	au	hobnails	fe		m	5 and 1
2b	e	2	au	jug	g		m	6
2b	e	2	au	bone objects	bo		m	2; 3
2b	e	3	amp	beaker	g		ne	
2b	e	3	amp	bone objects	bo		u	1; 5
2b	e	3	amp	knife	fe		u	2
2b	e	3	amp	stylus	fe		u	3
2b	e	3	amp	pin?	cu		u	4
2b	e	3	amp	hobnails	fe		ne	8

2.7 Crundale Limeworks: other contexts

Phase	Spatial sub *group*	Burial	Sex/age	Type	Material	Location in pit
2b	e	2	au	quern stone	st	lid?

3. Cranmer House, London Road, Canterbury, Kent

3.0 Cranmer House: general information

Phase	Spatial sub group	Burial	Sex/age	Codification
1b	S	29	amp	CN0000
1b	S	30	am	CN001F
1b	S	52	cpu	NA
1d	N	7	cu	NA
1d	N	11	yam	CW001F
1d	S	31	am	NA
1d	S	41	yam	NA
1d	S	42	au	NA
2a	N	14	au	CN0000
2a	N	18	amp	NA
2a	N	24	am	CN0000
2a	N	25	au	NA
2a	S	48	au	NA
2a	S	53	au	CN0000
2b	N	1	au	NA
2b	N	2	yam	NA
2b	N	3	amp	CN1F2GM
2b	N	4	amp	NA
2b	N	10	au	NA
2b	N	15	yau	NA
2b	N	19	cu	CN4FCD2S
2b	N	22	au	NA
2b	N	23	am	CN3FCD1L
2b	N	26	au	NA
2b	S	27	au	CN5FCD1F
2b	S	28	yamp	CN2CD2FC
2b	S	35	yam	NA
2b	S	36	cpu	CN2FC1S
2b	S	40	au	NA
2b	S	43	au	LA1F00
2b	S	44	au	CN2FD1S
2b	S	45	au	LA0000
2b	S	46	am+au	LA2FD5FGS
2b	S	50	au	CN2CB1F
2c	N	13	yam	NA
2c	N	17	am	CN1D00
2c	N	99	au	CN3FCD1M
2c	S	33	afp	CW3FCD2FS
2c	S	37	au	NA
2c	S	38	am	NA
2c	S	39	au	NA

3.1 Cranmer House: cremated bone

Phase	Spatial sub group	Burial	Sex/age	Weight in Grams.	Primary container	Location in pit
1b	S	29	amp	110	bowl	u
1b	S	30	am	950	jar	u
1b	S	52	cpu	80	jar	u
1d	N	7	cu	150	jar	u
1d	N	11	yam	1125	jar	u
1d	S	31	am	425	jar	u
1d	S	41	yam	1075	jar	u
1d	S	42	au	125	jar	u
2a	N	14	au	640	jar	u
2a	N	18	amp	725	flagon	u
2a	N	24	am	250	jar	u
2a	N	25	au	300	jar	u
2a	S	48	au	200	jar	u
2a	S	53	au	25	jar	c
2b	N	1	au	1675	jar	u
2b	N	2	yam	3200	jar	u
2b	N	3	amp	1370	jar	nw
2b	N	4	amp	1750	jar	u
2b	N	10	au	300	jar	u
2b	N	15	yau	1800	jar	u
2b	N	19	cu	150	jar	u
2b	N	22	au	135	jar	u
2b	N	23	am	1100	jar	u
2b	N	26	au	100	jar	u
2b	S	27	au	600	jar	u
2b	S	28	yamp	1435	jar	c
2b	S	35	yam	650	jar	u
2b	S	36	cpu	75	jar	c
2b	S	40	au	550	jar	u
2b	S	43	au	775	loose/bag?	u
2b	S	44	au	975	jar	u
2b	S	45	au	35	loose/bag?	u
2b	S	46	am+au	5975	loose/bag?	u
2b	S	50	au	600	jar	c
2c	N	13	yam	860	jar	u
2c	N	17	am	525	jar	u
2c	N	99	au	1320	jar	u
2c	S	33	afp	375	jar	u
2c	S	37	au	225	jar	u
2c	S	38	am	215	jar	u
2c	S	39	au	400	jar	u

3.2 Cranmer House: other possible pyre material

Phase	Spatial sub group	Burial	Sex/age	Type	Material	Small find No.
1b	S	52	cpu	nails	fe	45
2a	N	14	au	nails	fe	19
2b	N	2	yam	nails	fe	46
2b	N	3	amp	nails	fe	50
2b	N	4	amp	nails	fe	33
2b	N	10	au	antler objects	bo	47
2b	N	15	yau	antler objects	bo	22
2b	N	19	cu	nails	fe	16
2b	N	40	au	nails	fe	28/31
2b	S	46	am+au	nails	fe	35
U	N	8	U	nails	fe	15
2b	N	9	U	nails	fe	17

3.3 Cranmer House: ceramic primary containers

Phase	Spatial sub group	Burial	Sex/age	Type	Quality	Context
1b	S	29	amp	bowl		A
1b	S	30	am	jar	second?	A
1b	S	52	cpu	jar?		A
1d	N	7	cu	jar		A
1d	N	11	yam	jar		A
1d	S	31	am	jar		A
1d	S	41	yam	jar		A
1d	S	42	au	jar		A
2a	N	14	au	jar		A
2a	N	18	amp	flagon		A
2a	N	24	am	jar		A
2a	N	25	au	jar		A
2a	S	48	au	jar		A
2a	S	53	au	jar		A
2b	N	1	au	jar		A
2b	N	2	yam	jar	second?	A
2b	N	3	amp	jar		A
2b	N	4	amp	jar		A
2b	N	10	au	jar		A
2b	N	15	yau	jar		A
2b	N	19	cu	jar		A
2b	N	22	au	jar		A
2b	N	23	am	jar		A
2b	N	26	au	jar		A
2b	S	27	au	jar		A
2b	S	28	yamp	jar		A
2b	S	35	yam	jar		A
2b	S	36	cpu	jar		A

2b	S	40	au	jar		A
2b	S	44	au	jar		A
2b	S	50	au	jar		A
2c	N	13	yam	jar		A
2c	N	17	am	jar	second?	A
2c	N	99	au	jar		J
2c	S	33	afp	jar		A
2c	S	37	au	jar		A
2c	S	38	am	jar		A
2c	S	39	au	jar		A

3.4 Cranmer House: secondary containers

Phase	Spatial sub group	Burial	Sex/age	Material	Type	Vertical position	Location in pit	Context
1d	N	11	yam	W?	box?	up	c	
2b	S	43	au	A	amphora	up	u	A
2b	S	45	au	A	amphora	up	w	A
2b	S	46	am+au	A	amphora	up	sw	A
2c	S	33	afp	W?	box?	u	u	

3.5 Cranmer House: accessory vessels

Phase	Spatial sub group	Burial	Material	Type	Quality	Provenance	Location in pit	Context
1b	S	52	c	flagon?			u	B
1d	S	42	c	flagon?			u	B
2a	N	25	c	jar			u	A
2b	N	3	c	flask			se	B
2b	N	15	c	beaker		import	u	E
2b	N	15	c	flagon			u	C
2b	N	19	c	flagon			u	B
2b	N	19	c	dog dish		special?	u	C
2b	N	19	sam	dish		c.gaul	u	D
2b	N	19	c	beaker			u	E
2b	N	22	c	flagon?			u	B
2b	N	22	sam	dish		c.gaul	u	C
2b	N	23	c	flask			u	B
2b	N	23	c	miniature vessel		special?	u	F
2b	N	23	c	jar			u	E
2b	N	23	c	pie dish			u	C
2b	N	23	c	beaker		import	u	D
2b	S	27	c	beaker		import	u	F
2b	S	27	c	dog dish			u	B
2b	S	27	c	dog dish			u	C
2b	S	27	c	flask			u	D
2b	S	27	c	beaker			u	E
2b	S	28	c	beaker			s	C

2b	S	28	c	dog dish		lid	B
2b	S	36	c	beaker		nw	B
2b	S	36	c	flagon		n	C
2b	S	43	c	flask?		m?	B
2b	S	44	c	dog dish		u	C
2b	S	44	c	flagon?		u	B
2b	S	46	c	flagon		m	B
2b	S	46	c	pie dish		m	C
2b	S	50	c	lid		lid	C
2b	S	50	c	cup	special?	nw	D
2b	S	50	sam	bowl	c.gaul	e	E
2c	N	17	c	dog dish		u	B
2c	N	99	sam	dish	c.gaul	u	G
2c	N	99	c	flagon?		u	F
2c	N	99	c	beaker		u	H
2c	S	33	c	beaker	import	u	C
2c	S	33	c	flask		u	B
2c	S	38	c	flagon?		u	B

3.6 Cranmer House: other accessories

Phase	Spatial sub group	Burial	Sex/age	Type	Material	Provenance	Location in pit	Context	Small find No.
1b	S	30	am	hobnails	fe		flanking		
1d	N	7	cu	hobnails	fe		m		1
1d	N	11	yam	hobnails	fe		flanking		20
2a	N	18	amp	hobnails	fe		c		58
2a	S	48	au	unguent bottle	g		u	B	
2b	N	3	amp	mirror	cu	import?	w		4
2b	N	3	amp	flask	g		u	C	
2b	N	4	amp	hobnails	fe		m		?
2b	N	19	cu	bracelet	cu		m		18
2b	N	19	cu	bead	bo		m		22
2b	N	23	am	lamp	co		m	G	
2b	S	27	au	hobnails	fe		flanking		57
2b	S	28	yamp	hobnails	fe		flanking		
2b	S	28	yamp	coin	m		m	?	
2b	S	40	au	figurine	co	import	u		9
2b	S	46	am+au	unguent bottle	g		m	F	
2b	S	46	am+au	miniature sword	fe	import?	m		40,53
2b	S	46	am+au	knife	fe		m		54
2b	S	46	am=au	knife	fe		m		49
2b	S	46	am+au	hobnails	fe		m		59
2b	S	50	au	hobnails	fe		flanking		
2c	N	99	au	mirror	cu	import?	lid		22
2c	S	33	afp	hobnails	fe		m		48
2c	S	33	afp	dish	pe		m		10

3.7 Cranmer House: other contexts

Phase	Spatial sub group	Burial	Sex/age	Type	Material	Location in pit	Context
2a	N	18	amp	pebble	st	stopper?	A
2a	S	53	au	tile	cbm	lid	
2b	S	28	yamp	tile	cbm	lid	
2b	S	44	au	tanged flint arrowhead	st	u	34
2b	S	46	am+au	marker?	cut	n	46a
2b	S	50	au	lid	c	lid?	C
2c	N	99	au	pebble	st	stopper?	F
2c	N	99	au	tile	cbm	lid	
2c	S	38	am	frag	cu	u	30

4. St. Dunstan's Terrace, Canterbury, Kent

4.0 St. Dunstan's Terrace: general information

Phase	Spatial sub group	Burial	Sex/age	Codification
1a	n	55	u	LW1D2FG
1a	n	56	u	CA001F
1a	n	94	u	LW002FG
1a	s	5	u	CN0000
1a	s	25	u	CN1C00
1a	s	26	u	CN0000
1a	s	31	u	CN1C00
1a	s	41	u	CN2BJ00
1a	s	48	u	CN0000
1a	s	81	u	LN1S00
1a	s	91	u	CN1S2B
1a	s	96	u	CN1B00
1b	n	8	u	CN0000
1b	n	68	u	LN2DJ00
1b	n	79	u	CN1C00
1b	s	27	u	CN0000
1b	s	30	u	CN1S00
1c	n	32	u	CN0000
1c	n	49	d	NN1S1F
1c	n	66	u	CN0000
1c	n	69	u	CN0000
1c	s	4	u	NA
1c	s	15	u	CN0000
1c	s	16	u	CN2S00
1c	s	39	u	CN0000
1c	s	46	u	CN0000
1c	s	86	u	CN0000
2a	n	7	u	CN3FC00
2a	n	9	u	CN1C1F
2a	n	10	u	CN1C00
2a	n	14	u	CN001M
2a	n	23	u	CN2FC1F
2a	n	47	u	CN1F1F
2a	n	50	u	CW4WFCDS00
2a	n	51	u	CN0000
2a	n	52	u	CN1C00
2a	n	60	u	CN3FC1F
2a	n	61	u	CN1F1S
2a	n	64	u	CN0000
2a	n	77	u	CN3FBJ1F
2a	n	83	u	CN1C00
2a	n	93	u	CN1J00
2a	s	3	u	CN1B00
2a	s	18	u	CN1C1F

2a	s	34	u	CN0000
2a	s	36	u	CN2BS00
2a	s	40	u	CN2FD3FLB
2a	s	43	u	CN1F1F
2a	s	85	u	CN0000
2a	s	88	u	CN0000
2b	n	57	u	CN3FCJ00
2b	n	62	u	CN4FCDS00
2b	n	73	u	CN2J00
2b	s	1	u	CN1F1F
2b	s	2	u	CN1D00
2b	s	45	u	CN1C00
2b	s	58	u	CN2FD00
2b	s	63	u	CW0000
2b	s	76	u	CN1F00
2b	s	87	u	LN004FGS
2b	s	99	u	CN0000
3	n	33	u	CN2FD00
3	n	65	u	CN1J1F
3	s	28	a	NN3FCD00
3	s	90	u	CN0000

4.1 St. Dunstan's Terrace: ceramic primary containers

Phase	Spatial sub group	Burial	Type	Quality	Context
1a	N	56	jar		1417
1a	S	5	beaker		82
1a	S	25	beaker		295
1a	S	26	jar		297
1a	S	31	jar		318
1a	S	41	jar		543
1a	S	48	beaker		1338
1a	S	91	jar		1165
1a	S	96	jar		1665
1b	N	8	jar		68
1b	N	79	bowl		1567
1b	S	27	jar	second	302
1b	S	30	bowl		315
1c	N	32	jar		476
1c	N	66	jar		1481
1c	N	69	jar		1497
1c	S	15	jar		110
1c	S	16	jar		395
1c	S	39	jar		513
1c	S	46	jar		1282
1c	S	86	flask	graffito	1624
2a	N	7	jar		60
2a	n	9	jar	second	77

2a	n	10	jar		71
2a	n	14	jar		94
2a	n	23	jar		277
2a	n	47	jar		1285
2a	n	50	jar		1361
2a	n	51	jar		1366
2a	n	52	jar		1369
2a	n	60	jar		1404
2a	n	61	jar		1411
2a	n	64	jar		1445
2a	n	77	jar		1558
2a	n	83	bowl		1569
2a	n	93	jar		1701
2a	s	3	jar		45
2a	s	18	jar		128
2a	s	34	jar		392
2a	s	36	jar		399
2a	s	40	bowl		536
2a	s	43	jar		1165
2a	s	85	jar		1617
2a	s	88	jar		1638
2b	n	57	jar		1442
2b	n	62	jar		1421
2b	n	73	flagon		1533
2b	s	1	jar		35
2b	s	2	flask		108
2b	s	45	jar		1275
2b	s	58	jar		1401
2b	s	63	jar		1432
2b	s	76	jar		1531
2b	s	99	jar		4029
2c	n	65	jar	hole	1478
3a	n	33	jar		347
3c	s	90	bowl		1640

4.2 St. Dunstan's Terrace: secondary containers

Phase	Spatial sub group	Burial	Material	Type	Vertical position	Location in pit	Context
1a	n	55	W and cu?	Casket or cover?	up?	c	1383
1a	n	56	A	amphora	up	c	1390
1a	n	94	W	box	up?	c	1487/1596
2a	n	50	W and cu?	casket?	up?	se	9a–s
2b	s	63	W?	box?	up?	u	1431

4.3 St. Dunstan's Terrace: accessory vessels

Phase	Spatial sub group	Burial	Material	Type	Quality	Provenance	Location in pit	Context
1a	n	55	sam	dish		s.gaul	ne	1385
1a	s	25	c	beaker			sw	294
1a	s	31	c	beaker			nw	323
1a	s	41	c	jar			lid	542
1a	s	41	c	bowl			m	547
1a	s	81	c	miniature vessel		special?	u	1552
1a	s	91	c	honey jar		special?	m	3017
1a	s	96	c	beaker			u	
1b	n	68	c	jar			u	1494
1b	n	68	c	dish			s	1493
1b	n	79	c	beaker			se	1566
1b	s	30	c	miniature vessel		special?	ne	324
1c	n	49	c	small vessel?		special?	u	1358
1c	s	16	c	small vessel?		special?	m	3001
1c	s	16	c	small vessel?		special?	m	3002
2a	n	7	c	beaker			n	61
2a	n	7	c	flask			ne	62
2a	n	7	c	flagon			lid	
2a	n	9	c	beaker			n	78
2a	n	10	c	beaker			ne	72
2a	n	23	c	flagon			nw	286
2a	n	23	c	beaker			se	278
2a	n	47	c	flask			ne	1286
2a	n	50	c	dish			lid?	1377
2a	n	50	c	flagon		Colchester?	sw	1376
2a	n	50	c	beaker		Colchester	u	1361
2a	n	50	c	miniature vessel		special?	m	3066
2a	n	52	c	beaker			ne	1373
2a	n	60	c	beaker			n	1407
2a	n	60	c	flagon			w	1408
2a	n	60	c	beaker			u	1406
2a	n	61	c	flagon			e	1412
2a	n	77	c	bowl			ne	1560
2a	n	77	c	jar			ne	1561
2a	n	77	c	flagon			sw	1559
2a	n	83	c	beaker			e	1570
2a	n	93	c	jar			lid	1700
2a	s	3	c	beaker			n	46
2a	s	18	c	beaker			e	129
2a	s	36	c	miniature vessel		special?	m	3007
2a	s	36	c	bowl			n	1235
2a	s	40	c	flask			nw	537
2a	s	40	sam	dish		s.gaul	ne	535
2a	s	43	c	flagon			se	1166
2b	n	57	c	beaker			u	1447
2b	n	57	c	flagon			u	1443
2b	n	57	c	jar			lid	1395

2b	n	62	c	miniature vessel?		special?	m	3070	
2b	n	62	sam	dish		c.gaul	lid?	1421	
2b	n	62	c	beaker			s	1440	
2b	n	62	c	flagon			n	1422	
2b	n	73	c	jar	second		lid	1522	
2b	n	73	c	jar			u	1522	
2b	s	1	c	flagon			ne	36	
2b	s	2	c	dish?			lid?	108	
2b	s	45	c	beaker		import	s	1300	
2b	s	58	c	dog dish			s	1416	
2b	s	58	c	flagon			se	1400	
2b	s	76	c	flagon			w	1530	
3	n	33	c	flagon			u	4021	
3	n	33	sam	dish		e.gaul	u	4021	
3	n	65	c	jar			sw	1479	
3	s	28	c	flask			u	311	
3	s	28	c	beaker			u	310	
3	s	28	c	dog dish			u	309	

4.4 St. Dunstan's Terrace: other accessories

Phase	Spatial sub-group	Burial	Sex/age	Type	Material	Quality	Provenance	Location in pit	Context	Small find No.
1a	n	55	u	beaker	g			n	1384	
1a	n	55	u	hobnails	fe	other shoe		e	1386	
1a	n	56	u	hobnails	fe	other shoe		e	1448	
1a	n	94	u	hobnails	fe	other shoe		m	1489	
1a	n	94	u	unguent bottle	g			m		
1a	s	91	u	brooch	cu			w		711
1a	s	91	u	brooch	cu			w		710
1c	n	49	d	hobnails	fe			u		
2a	n	9	u	hobnails	fe	other shoe		nw	335	
2a	n	14	u	mirror	cu		import?	lid?		116
2a	n	23	u	hobnails	fe			flanking	289	
2a	n	47	u	hobnails	fe	other shoe		flanking	1441	
2a	n	60	u	hobnails	fe	other shoe?		w	1430	
2a	n	61	u	figurine	co		import	ne		601
2a	n	77	u	hobnails	fe			s	1590	
2a	s	18	u	hobnails	fe			u		
2a	s	40	u	hobnails	fe			se	643	
2a	s	40	u	jar?	g			w	538	
2a	s	40	u	brooch	cu			se		394
2a	s	43	u	hobnails	fe			flanking	1163	
2b	s	1	u	hobnails	fe			flanking	87	
2b	s	87	u	unguent bottle	g			u	1632	
2b	s	87	u	bottle	g			u	1632	
2b	s	87	u	bowl?	g			ne	1632	
2b	s	87	u	hobnails	fe	other shoe		n	1627	
3	n	65	u	hobnails	fe			flanking	1509	

4.5 St. Dunstan's Terrace: other contexts

Phase	Spatial sub-group	Burial	Sex/age	Type	Material	Location in pit	Context
1a	n	94	u	post holes?	cut		1490
1a	s	91	u	marker?	cut		1671-9
1c	s	46	u	lid	c	lid?	1280
2a	n	7	u	nails	fe		
2a	n	23	u	lid	c	lid	3021
2a	n	60	u	lid	c	lid	1405
2a	n	64	u	lid	c	lid	1445
2a	s	3	u	nails	fe		
2a	s	34	u	deposit	deposit		368
2a	s	85	u	lid	c	lid	1617
2a	s	88	u	frag.	fe		
2b	n	62	u	deposit	deposit		1519
2b	s	45	u	tile	cbm	lid	1270
2b	s	76	u	board?	w	lid?	1565
2b	s	87	u	ring	cu	lid?	681
3	n	33	u	marker?	cut		
3	s	90	u	nail frags	fe		

5. Turner Rise and Abbey Field, Colchester, Essex

5.0 Turner Rise and Abbey Field: undefined burials

Site	Phase	Spatial sub group	Context	Notes
TR	1b	A	38	mixed with potsherds including Cam 154/155 flagon (Claudio-neronian) and Coarse Reduced Ware (GX) (rob form 2 vessels) as well as 6 fe nail frags in charcoal rich lenses
TR	1b	A	29	scattered throughout charcaol rich fill, with potsherds form everted rim, Coarse Reduced Ware as well as flint tempered prehistoric and 21 nails and "decayed wood"
TR	1b	B	7	mixed with various postsherds and 10 fe nails in charcoal rich fill
AF	2b	D	160	mixed with potsherds (BB2, Coarse Grey Ware (GX), coarse oxidised at least 4 vessels) and fe nails
AF	2c	D	157	mixed with burnt stones and potsherds (Coarse Grey Ware (GX), Cam 280 narrow necked base and side, BB2)
AF	2c	D	90	large burnt mammal femur fragment mentioned, also includes crushed pot base, 22 nails and at least 87 hobnails, no carbon reported
AF	2c	D	93	not described, so could be animal, scattered amongst potsherds including Coarse Grey Ware (GX) and mortarium (pyre stage?) of at least 3 vessels and 6 fe nails amid charcoal rich lenses
AF	2c	D	44	jar base, also nails and 9 hobnails, apparently cut into slot F113 although the relationship with this feature is unclear, with charcoal rich fill
AF	2c	D	41	mixed with nails (2) and sherds of BB2 dish in charcoal rich fill
AF	2c	D	30	mixed with potsherds (Coarse Grey Ware (GX) and BB2), nails and vitrified clay (76g, scraped from pyre?) in charcoal rich fill
AF	3b	D	207	mixed with 5 nails, various potsherds (Trajanic/Hadrianic to later Nene Valley) and unburnt animal bone in charcoal rich fill
AF	3b	D	205	mixed with 43 nails, unburnt animal bone and beaker fragments (Cam 407 tall ovoid folded beaker, Nene Valley) in charcoal rich fill
AF	3b	D	85	mixed with 29 fe nails, upright crushed Cam 408 reddish brown possibly miniature beaker to the west in charcoal rich fill
AF	3b	D	84	mixed with 255 fe nails, sherds of possibly burnt or kiln waster Coarse Grey Ware (GX) Cam 268 and Cam 40A/B dish (BB2) amid charcoal rich lenses
AF	D	D	140	mixed with 2 nails and various burnt potsherds (not described) in charcoal rich fill and close to possible pyre site F37

5.1 Turner Rise and Abbey Field: general information (more definite cremation burials)

Site	Phase	Spatial sub group	Burial	Sex/age	Codification
TR	1a	A	36	apu	SW1J00
TR	1a	A	35	au	CN2FJ00
TR	1a	A	30	afp	NA
TR	1a	A	28	au	CN2FS1B
TR	1a	A	27	au	SN0000
TR	1b	A	18	au	LW4DJ00
TR	1b	A	39	afp	CN0000
TR	1b	A	19	au	LW4FC00
TR	1b	B	15	u	NA
TR	1b	B	9	au	NA
TR	1b	B	1	cu+au	CN0000
TR	1b	B	4	au	CN1D00
TR	1b	B	3	au	LN2FC00
TR	1b	B	2	au	CN0000
TR	1b	A	21	au	LN3FCJ00
TR	1c	B	42	au	SN4CDB1L
AF	2b	D	200	au	CT4FDB1L
AF	2b	D	24	u	LN2DB00
TR	2b	B	6	u	NA
TR	2b	A	25	au	SN0000
TR	2c	A	26	u	NA
TR	2c	A	33	au	SN0000
AF	2c	D	211	au	CN0000
AF	2c	D	22	au	NA
AF	2c	C	20	au	LN1F00
AF	2c	D	33	yau	NA
AF	2c	D	28	yau	CN0000
AF	2c	D	32	u	SN001S
AF	2c	D	23	u	LN1B00
AF	2c	D	86	au	CN0000
AF	2c	D	193	au	NA
AF	2c	D	176	u	CN0000
AF	2c	C	164	am	CN0000
AF	2c	D	145	au	NA
AF	2c	D	115	au	SN0000
AF	2c	D	96	au	CN0000
AF	2c	D	31	u	LN1S00
AF	2c	D	95	au	CN1J00
AF	2c	C	88	au	CN0000
AF	2c	D	82	u	CN001S
AF	2c	D	81	af	CN0000
AF	2c	C	75	au	CN0000
AF	2c	C	73	am	CN0000
AF	2c	C	72	au	CN0000
AF	2c	D	36	au	CN0000

AF	2c	C	71	au	CN0000
AF	2c	D	66	au	SN0000
AF	2c	D	39	am	CN1D00
AF	2c	D	46	au	CN0000
AF	2d	D	153	au	CN0000
AF	2d	D	158	au	CN1B00
AF	3a	C	89	au	CN0000
AF	3b	D	80	c	NN1B00
AF	3b	D	27	cpu	LN1S00
AF	3b	D	26	au	CN1C00
AF	3b	D	25	u	LN1C6CS
AF	3b	D	186	d	NN2CD00
AF	3b	D	35	au	SN1C00
AF	3b	D	204	yau	SW4FCS3C
AF	3b	C	2	u	CN0000
AF	3c	D	203	d	NN3CBS1S
AF	3c	D	21	au	NA
AF	4b	D	185	u	CN1B00

5.2 Turner Rise and Abbey Field: cremated bone from more definite cremation burials

Site	Phase	Spatial Sub group	Burial	Sex/age	Weight (in grams.)	Primary container	Location in pit
TR	1a	A	36	apu	141	scattered?	u
TR	1a	A	35	au	530	jar	c
TR	1a	A	30	afp	213	scattered?	u
TR	1a	A	28	au	96	jar	ne
TR	1a	A	27	au	670	scattered?	c
TR	1b	A	18	au	531	loose/bag?	u
TR	1b	A	39	afp	940	jar	c
TR	1b	A	19	au	344	loose/bag?	u
TR	1b	B	15	u	26	beaker	u
TR	1b	B	9	au	146	beaker	u
TR	1b	B	1	cu+au	437	jar	u
TR	1b	B	4	au	859	jar	c
TR	1b	B	3	au	304	loose/bag?	u
TR	1b	B	2	au	1359	jar?	c
TR	1b	A	21	au	177	loose/bag?	u
TR	1c	B	42	au	249	scattered?	u
AF	2b	D	200	au	478	jar	c
AF	2b	D	24	u	50	loose/bag?	u
TR	2b	B	6	u	384	jar	u
TR	2b	A	25	au	1314	scattered?	c
TR	2c	A	26	u	26	jar	c
TR	2c	A	33	au	180	scattered?	c
AF	2c	D	22	au	220	loose/bag?	u
AF	2c	D	211	au	357	jar	u
AF	2c	C	20	au	126	loose/bag?	u
AF	2c	D	31	u	27	loose/bag?	u

AF	2c	D	28	yau	228	jar	c
AF	2c	D	23	u	1	loose/bag?	u
AF	2c	C	88	au	486	jar	c
AF	2c	D	193	au	11	jar	u
AF	2c	D	176	u	338	jar	c
AF	2c	C	164	am	1081	jar	c
AF	2c	D	145	au	36	jar	u
AF	2c	D	115	au	217	scattered?	c
AF	2c	D	96	au	249	jar	c
AF	2c	D	95	au	293	jar	c
AF	2c	D	86	au	248	jar	c
AF	2c	D	32	u	3	scattered?	nw
AF	2c	D	82	u	35	jar	s
AF	2c	D	81	af	580	jar	c
AF	2c	C	73	am	1055	jar	c
AF	2c	C	72	au	517	jar	c
AF	2c	C	71	au	482	jar	c
AF	2c	D	66	au	48	scattered?	c
AF	2c	D	33	yau	340	dish	u
AF	2c	D	46	au	203	jar	c
AF	2c	D	39	am	636	jar	c
AF	2c	D	36	au	728	jar	c
AF	2c	C	75	au	352	jar	c
AF	2d	D	153	au	626	jar	c
AF	2d	D	158	au	571	jar	c
AF	3a	C	89	au	214	jar	c
AF	3b	C	2	u	u	jar	c
AF	3b	D	25	u	10	loose/bag?	s
AF	3b	D	35	au	27	scattered?	u
AF	3b	D	27	cpu	72	loose/bag?	c
AF	3b	D	204	yau	12	loose/bag?	u
AF	3b	D	26	au	151	jar?	c
AF	3c	D	21	au	299	loose/bag?	u
AF	4b	D	185	u	291	jar	c

5.3 Turner Rise and Abbey Field: pyre goods and burnt animal bone from more definite cremation burials

Site	Phase	Spatial sub group	Burial	Sex/age	Type	Material
TR	1b	B	4	au	pig or cattle	b
TR	1b	B	2	au	stud	cu
TR	1b	B	1	cu+au	cattle or horse	b
TR	1c	B	42	au	animal	b
AF	2b	D	24	u	bird?	b
AF	2c	D	176	u	animal?	b
AF	2c	D	81	af	bird or small mammal	b
AF	2c	C	73	am	animal	b
AF	2c	D	33	yau	pig?	b

AF	2c	D	28	yau	animal		b
AF	2c	D	28	yau	bird		b
AF	2c	D	22	au	pig		b
AF	3b	D	204	yau	bird or small mammal		b
AF	3b	D	27	cpu	bird or small mammal?		b

5.4 Turner Rise and Abbey Field: ceramic primary containers

Site	Phase	Spatial sub group	Burial	Sex/age	Type	Quality	Containing or Scattered	Context
TR	1a	A	27	au	jar	second	S	A
TR	1a	A	36	apu	jar	second	S	A
TR	1a	A	35	au	jar	second	C	A
TR	1a	A	28	au	jar	second	C	A
TR	1b	B	1	cu+au	jar		C	A
TR	1b	B	9	au	beaker	second	C	A
TR	1b	B	15	u	beaker		C	A
TR	1b	A	39	afp	jar	second	C	A
TR	1b	B	4	au	jar		C	A
TR	1b	B	2	au	jar		C	A
TR	1c	B	42	au	jar		S	A
AF	2b	D	200	au	jar		C	662
TR	2b	A	25	au	jar		S	A
TR	2b	B	6	u	jar	second	C	A
AF	2c	D	66	au	jar		S	154/6
TR	2c	A	26	u	jar		C	A
TR	2c	A	33	au	jar	second	S	A
AF	2c	D	28	yau	jar		C	42
AF	2c	D	32	u	miniature vessel		S	59
AF	2c	D	33	yau	dish		C	67
AF	2c	D	36	au	jar		C	108
AF	2c	D	46	au	jar		C	137
AF	2c	D	86	au	jar		C	139
AF	2c	D	193	au	jar		C	598
AF	2c	D	176	u	jar		C	506
AF	2c	C	164	am	jar		C	509
AF	2c	D	145	au	jar		C	
AF	2c	D	115	au	jar		S	
AF	2c	D	96	au	jar		C	158/166
AF	2c	D	39	am	jar		C	164
AF	2c	D	95	au	jar		C	769
AF	2c	D	211	au	jar	second	C	1064
AF	2c	C	88	au	jar		C	204
AF	2c	D	82	u	jar		C	249
AF	2c	D	81	af	jar	second	C	235
AF	2c	C	75	au	jar		C	217
AF	2c	C	73	am	jar		C	191
AF	2c	C	72	au	jar		C	
AF	2c	C	71	au	jar		C	177

AF	2d	D	153	au	jar	second?	C	
AF	2d	D	158	au	jar	second?	C	508/741
AF	3a	C	89	au	jar		C	221
AF	3b	D	26	au	jar		C	52
AF	3b	D	35	au	beaker		S	107
AF	3b	C	2	u	jar		C	6
AF	3b	D	204	yau	beaker		S	682
AF	4b	D	185	u	jar		C	562

5.5 Turner Rise and Abbey Field: secondary containers

Site	Phase	Spatial sub-group	Burial	Sex/age	Material	Type	Description
TR	1a	A	36	au	W	box	fe sheet fragments with mineralized wood adhering as well as 9 fe nail fragments
TR	1b	A	18	au	W	box	fragments of sheet fe, many with traces of mineralised wood, forming probable outline of box
TR	1b	A	19	au	W	box	decayed wood from pit as a whole, as well as various sherds
TR	1c	B	42	au	W?	box?	9 nails and 5 tacks
AF	2b	D	200	au	T	tile cist	formed of 5 complete "Lydion" tiles forming sides and lid, all have "signitures" and at least one looks sooted, or burnt
AF	2b	D	24	u	W?	box?	no mineralized wood, but nails at corners and elsewhere in lower fill, as well as cluster of 40 found in the centre of the feature
AF	3b	D	204	yau	W?	box?	14 nails including 4 in a possible line
AF	3b	D	27	cpu	W?	box?	nails around pit and in lower fill
AF	3b	D	25	u	W?	box?	20 nails in lower fill

5.6 Turner Rise and Abbey Field: accessory vessels

Site	Phase	Spatial sub group	Burial	Material	Type	Quality	Provenance	Location in pit	Context
TR	1a	A	35	c	Flagon			w	C
TR	1a	A	28	c	miniature vessel	second?	special?	m	C
TR	1a	A	28	c	Flagon			s	B
TR	1a	A	35	c	jar?	second		s	B
TR	1b	A	18	c	jar?	second		ne	A
TR	1b	A	21	c	Beaker			u	C
TR	1b	A	21	c	Flagon			u	B
TR	1b	A	21	c	jar	second		u	A
TR	1b	A	19	c	vessel		Verulamium	w	D

TR	1b	A	19	c	beaker	second			u	A
TR	1b	A	19	c	beaker				u	B
TR	1b	A	19	c	flagon	second			u	C
TR	1b	A	18	sam	dish			s.gaul	e	D
TR	1b	A	21	c	potsherds				u	U
TR	1b	A	18	c	jar?				se	B
TR	1b	B	15	c	flagon?				u	A
TR	1b	B	3	c	flagon				m	A
TR	1b	B	3	c	beaker				m	B
TR	1b	A	18	c	vessel				e	C
TR	1b	B	4	c	dish				lid?	B
TR	1c	B	42	c	bowl			Verulamium	lid?	B
TR	1c	B	42	c	beaker	second			u	A
TR	1c	B	42	sam	cup			s.gaul	u	D
TR	1c	B	42	sam	dish			s.gaul	u	C
AF	2b	D	24	c	bowl				m	62?
AF	2b	D	24	c	dish				m	114?
AF	2b	D	200	c	flagon				w	660
AF	2b	D	200	c	flagon				w	662
AF	2b	D	200	c	dish				u	658
AF	2b	D	200	c	bowl				lid	659
AF	2c	D	23	c	jar				u	?
AF	2c	C	20	c	flagon				m	21
AF	2c	D	23	c	bowl				m	191
AF	2c	D	39	c	dish				lid	121
TR	2c	A	33	c	potsherds				u	U
AF	2c	D	95	c	jar				lid?	U
AF	2c	D	31	c	miniature vessel			special?	m	50
AF	2c	D	33	c	jar				u	67
AF	2d	D	158	c	bowl	second			lid	743
AF	3b	D	186	c	dish				u	631
AF	3b	D	186	c	beaker				u	630
AF	3b	D	25	c	beaker	second?			u	65
AF	3b	D	204	c	miniature vessel			special?	m	683
AF	3b	D	80	c	jar				u	251
AF	3b	D	204	c	flagon	second		special?	m	684
AF	3b	D	27	c	miniature vessel	second		special?	m	194
AF	3b	D	27	c	beaker?				m	222
AF	3b	D	26	c	beaker				u	53
AF	3b	D	204	c	beaker				m	680/681
AF	3b	D	80	c	bowl				lid	250
AF	3c	D	203	c	bowl				u	671
AF	3c	D	203	c	miniature vessel			special?	u	671
AF	3c	D	203	c	beaker				u	671
AF	3c	D	21	c	beaker				s	185
AF	4b	D	185	c	bowl				lid?	731

5.7 Turner Rise and Abbey Field: other accessories

Site	Phase	Spatial sub-group	Burial	Sex/age	Type	Material	Location in pit	Small find/ context No.
TR	1a	A	28	au	brooch	cu	m	44
TR	1c	B	42	au	lamp	co	u	43
AF	2b	D	200	au	lamp	co	u	57
AF	2c	D	22	au	coin	cu	m	4
AF	2c	D	32	u	cup/dish	pe	e	5
AF	2c	D	82	u	disc	ps	w	?
AF	3b	D	25	u	necklace	ps	n	6/etc
AF	3b	D	25	u	armlet	ps	n	16
AF	3b	D	25	u	armlet	cu	n	17
AF	3b	D	25	u	armlet	ps	n	6, 8, 9, 10,11,13, 14,15,1, 19, 208
AF	3b	D	25	u	coin	cu	nw	7
AF	3b	D	25	u	coin	cu	nw	7
AF	3b	D	204	yau	coin	cu	m	61
AF	3b	D	204	yau	coin	cu	m	59
AF	3b	D	204	yau	coin	cu	m	60
AF	3c	D	21	au	armlet	cu	u	3
AF	3c	D	203	u	Mixing palette	st	u	58

5.8 Turner Rise and Abbey Field: other contexts

Site	Phase	Spatial Sub group	Burial	Sex/age	Type	Material	Location in pit	Notes
TR	1a	A	28	au	fragment	cu	lid?	thin strip, not described further
TR	1a	A	27	au	nail fragment	fe		from pit fill
TR	1a	A	28	au	stone fragment	st	lid?	doesn't say what sort, part of original lid?
TR	1a	A	35	au	lid	c	lid?	lightly domed flat edge, Coarse Reduced Ware (GX), S&W 243
TR	1a	A	35	au	tacks	fe		4 from backfill
TR	1a	A	36	apu	marker?	cut	sw	stake hole? in sw corner
TR	1b	A	18	au	fragment	g		minute un-melted fragments
TR	1b	B	3	au	nail fragments	fe		12 in general fill
TR	1b	B	3	au	brick	cbm	m	"piece of Roman brick"
TR	1b	B	4	au	nail fragments	fe		4 from jar
TR	1b	B	4	au	nail fragments	fe		from pit fill
TR	1b	B	15	u	nails	fe		12 from general fill
TR	2b	B	6	u	nail fragments	fe		2 poss. Associated
AF	2c	C	72	au	brick	cbm	lid	large fragment
AF	2c	D	211	au	tile	cbm	lid	*tegula* fragment

TR	2c	A	33	au	fragments	cu		2 sheet fragments with concretion from backfill
TR	2c	A	33	au	nail fragments	fe		2
AF	2c	D	23	u	nails	fe		4, not described, in fill
AF	2c	D	22	au	iron objects	fe	m	2, not described
AF	2c	C	20	au	fragments	g	m	fragments found near base of pit
AF	3b	C	2	u	nails	fe		general fill
AF	3b	D	26	au	nails	fe		general fill
AF	3b	D	26	au	nails	fe		general fill

6. Eastern Cemetery, London

6.0 Eastern Cemetery: material from 'undefined burials'

Area	Burial	Type	Phase	Quality	Plot
Group A	G0.36	"mercury" flask	2c	Pyre site	3
Group A	G0.36	human	2c	>500g	3
Group A	G0.36	turned box	2c	Pyre site	3
Group A	210	human	3b	unknown amount	3
Group A	215	human	2d	unknown amount	3
Group A	220	human	U	unknown amount	3
Group A	508	human	1b	unknown amount	2
Group A	508	marker?	1b		2
Group A	581	bowl	4a	burnt/deformed	2
Group A	581	casket?	4a	secondary?	2
Group A	581	chicken etc	4a		2
Group A	581	dish	4a	burnt/deformed	2
Group A	581	dish	4a	burnt/deformed	2
Group A	581	hairpin	4a		2
Group A	581	human	4a	<250g	2
Group A	581	jar	4a	burnt/deformed	2
Group A	598	human	3b	<250g	2
Group A	832	human	3c	<250g	2
Group A	833	human	2d	<250g	2
Group A	833	sheep(?)	2d		2
Group A	834	human	3a	<250g	2
Group A	834	sheep(?)	3a		2
Group A	835	human	2d	<250g	2
Group A	836	human	3c	>250g	2
Group A	837	human	2d	>1000g	2
Group A	837	sheep?	2d		2
Group A	841	human	3c	<250g	2
Group A	841	sheep(?)	3c		2
Group A	848	human	2d	unknown amount	3
Group A	848	tazza	2d	deformed?	3
Group C	754	hobnails	3c		28
Group C	754	human	3c	>250g	28
Group C	755	hobnails	3c		28
Group C	755	human	3c	>500g	28
Group C	756	hobnails	4a		28
Group C	756	human	4a	unknown amount	28
Group C	757	human	4a	<250g	28
Group C	758	box?	4a	secondary?	28
Group C	758	hobnails	4a		28
Group C	758	human	4a	unknown amount	28
Group C	761	chicken etc	3c		28
Group C	761	cu objects	3c		28
Group C	761	cu objects	3c		28
Group C	761	hairpin	3c		28
Group C	761	hobnails	3c		28
Group C	761	human	3c	>500g	28

Group C	761	inlay	3c		28
Group C	767	human	U	<250g	21
Group C	772	human	1c	<250g	21
Group C	779	human	3b	>250g	28
Group C	780	human	U	<250g	28
Group C	781	human	1a	<250g	28
Group C	782	human	4a	<250g	28
Group C	783	human	3c	>1000g	28
Group C	783	nails	3c		28
Group C	784	human	3c	>250g	28
Group C	786	hobnails	1c		28
Group C	786	human	1c	<250g	28
Group C	787	human	3c	<250g	28
Group C	787	nails	3c		28
Group C	788	chicken	U		28
Group C	788	human	U	<250g	28
Group C	789	human	2a	unknown amount	28
Group C	790	human	U	<250g	28
Group C	791	human	U	<250g	28
Group C	791	inlay	U		28
Group C	794	human	2d	<250g	28

6.1 Eastern Cemetery: general information (more definite cremation burials)

Group	Phase	Spatial sub group	Burial	Sex/age	Codification
Group A	1b	3	176	u	LN001C
Group A	1c	2	303	u	LA0000
Group A	1c	2	304	au	LN0000
Group A	1c	2	556	au	CN0000
Group A	1c	3	179	cu+iu	CN0000
Group A	1c	3	268	ou	CN0000
Group A	1d	2	343	amp	CN001S
Group A	1d	2	403	u	LN0000
Group A	1d	2	487	u	LN0000
Group A	2a	2	290	afp	CW0000
Group A	2a	3	231	af	CA001M
Group A	2b	2	297	au	CT1D00
Group A	2b	2	301	am	LA2F00
Group A	2b	3	177	af	CN0000
Group A	2b	3	180	iu	CN0000
Group A	2b	3	185	yau	CN0000
Group A	2b	3	187	cu	CN0000
Group A	2c	1	2	u	NA
Group A	2c	2	325	am	CA1D2LC
Group A	2c	2	335	ofp	CN001S
Group A	2c	2	349	afp	CA0000
Group A	2c	2	362	ou	CN1D1S
Group A	2c	2	388	u	CN0000
Group A	2c	2	399	ou+iu	CA001S

Group A	2c	2	417	ou	CA0000
Group A	2c	2	539	yau	CN0000
Group A	2c	2	563	au	LN0000
Group A	2c	2	838	am	CA0000
Group A	2c	2	839	af	CN1D3S
Group A	2c	2	842	afp+iu	CN1D00
Group A	2c	3	175	u	CA3FD00
Group A	2c	3	193	au	CN0000
Group A	2c	3	251	afp	CA1D00
Group A	2c	3	279	ou	CN1D00
Group A	2d	2	497	iu	LN0000
Group A	2d	2	567	yau	LT0000
Group A	2d	2	568	au	LT0000
Group A	2d	2	850	au	LN0000
Group A	3a	2	368	ofp	CA2D1S
Group A	3a	3	173	u	LW1C00
Group A	3b	1	5	yaf	CN0000
Group A	3b	2	413	afp	CN0000
Group A	3b	2	559	au	LN1B00
Group A	3b	2	584	afp	CN001C
Group A	3b	2	846	au	LN001C
Group A	3c	2	333	au	CT0000
Group A	3c	2	840	am	CW0000
Group A	3c	2	845	u	LN001C
Group A	4a	2	582	u	CN0000
Group A	4a	3	195	af or am	CN2CB00
Group B	2a	16	675	afp	CN1S1S
Group B	2a	17	979	au	CN0000
Group B	2a	17	988	u	CN0000
Group B	2a	17	1092	afp	CN005GMCS
Group B	2a	17	1145	u	CN0000
Group B	2b	16	224	au	CN0000
Group B	2b	16	255	au	CN1D00
Group B	2b	16	442	au	CN0000
Group B	2b	16	696	af	CN1D00
Group B	2b	16	4970	au	CN0000
Group B	2b	17	69	au	CN0000
Group B	2b	17	1002	cu	CN0000
Group B	2b	17	1121	u	CN0000
Group B	2d	17	736	u	LN0000
Group C	1a	21	768	af	CN0000
Group C	1c	21	769	afp	CN0000
Group C	1c	21	777	au	CN0000
Group C	1c	28	760	af	CN1F00
Group C	1c	28	795	afp	CN0000
Group C	1c	29	799	u	CN0000
Group C	2a	21	771	au	CN0000
Group C	2a	21	773	af	CW0000
Group C	2a	21	774	am	CN0000
Group C	2a	21	775	am	CN0000
Group C	2a	21	778	af	CN0000

Group C	2a	28	763	amp	CW0000
Group C	2a	28	798	cu	CN0000
Group C	2b	28	753	am	CA1D00
Group C	2b	28	766	au	CN0000
Group C	2b	28	792	afp	LN001C
Group C	2b	28	796	au	LW001C
Group C	2c	21	776	am	CN0000
Group C	2c	28	752	afp	CN0000
Group C	2c	28	762	au	CN0000
Group C	2c	28	764	au	CN0000
Group C	2c	28	785	afp	CA1D1S
Group C	2c	28	793	om	CN1D00
Group C	3b	29	797	au	LN001C
Group C	3c	28	759	ofp	CN0000

6.2 Eastern Cemetery: cremated bone from more definite cremation burials

Group	Phase	Plot	Burial	Sex/age	Quality	Weight in grams.	Primary container	Location in pit	Context
Group A	1b	3	176	u	undisturbed	unknown	loose/bag?	u	176
Group A	1c	2	303	u		u	loose/bag?	u	303
Group A	1c	2	304	au		15	loose/bag?	u	304
Group A	1c	2	556	au		601	jar	c	556
Group A	1c	3	179	cu+iu	undisturbed	100	beaker	c	179
Group A	1c	3	268	ou		99	flagon	u	268
Group A	1d	2	343	amp		1852	jar	c	343
Group A	1d	2	403	u		u	loose/bag?	u	403
Group A	1d	2	487	u	undisturbed	unknown	loose/bag?	u	487
Group A	2a	2	290	afp	undisturbed	1658	jar	c	290
Group A	2a	3	231	af	undisturbed	590	jar	n	231
Group A	2b	2	297	au	undisturbed	1261	jar	c	297
Group A	2b	2	301	am		493	loose/bag?	u	301
Group A	2b	3	177	af	undisturbed	1752	jar	u	177
Group A	2b	3	180	iu	undisturbed	206	jar	e	180
Group A	2b	3	185	yau		431	jar	c	185
Group A	2b	3	187	cu		458	jar	u	187
Group A	2c	1	2	u		u	jar	u	2
Group A	2c	2	325	am	undisturbed	1732	jar	c	325
Group A	2c	2	335	ofp		949	jar	nw	335
Group A	2c	2	349	afp		2000+	jar	c	349
Group A	2c	2	362	ou		838	jar	u	362
Group A	2c	2	388	u		u	jar	u	388
Group A	2c	2	399	ou+iu		1723	jar	u	399
Group A	2c	2	417	ou		729	jar	c	417
Group A	2c	2	539	yau		780	jar	c	539
Group A	2c	2	563	au	undisturbed	7	loose/bag?	u	563
Group A	2c	2	838	am	undisturbed	990	jar	c	838
Group A	2c	2	839	af	undisturbed	1408	jar	u	839
Group A	2c	2	842	afp+iu		633	beaker	u	842
Group A	2c	3	175	u	undisturbed	unknown	jar	c	175

Group A	2c	3	193	au		215	jar	u	193
Group A	2c	3	251	afp	undisturbed	1524	jar	u	251
Group A	2c	3	279	ou		385	jar	u	279
Group A	2d	2	497	iu		2	loose/bag?	u	497
Group A	2d	2	567	yau		200	loose/bag?	u	567
Group A	2d	2	568	au		334	loose/bag?	u	568
Group A	2d	2	850	au		u	loose/bag?	u	850
Group A	3a	2	368	ofp		1158	jar	c	368
Group A	3a	3	173	u	undisturbed	unknown	loose/bag?	u	173
Group A	3b	1	5	yaf	undisturbed	unknown	jar	u	5
Group A	3b	2	413	afp		1371	jar	c	413
Group A	3b	2	559	au		649	loose/bag?	u	559
Group A	3b	2	584	afp		660	jar	u	584
Group A	3b	2	846	au		202	loose/bag?	u	846
Group A	3c	2	333	au		618	jar	c	333
Group A	3c	2	840	am	undisturbed	1270	jar	n	840
Group A	3c	2	845	u		u	loose/bag?	u	845
Group A	4a	2	582	u	undisturbed	unknown	loose/bag?	u	582
Group A	4a	3	195	af or am	undisturbed	1557	jar and flask	e	195
Group B	2a	16	675	afp	undisturbed	1831	jar	c	133
Group B	2a	17	979	au		199	jar	c	135
Group B	2a	17	988	u		15	flagon	c	136
Group B	2a	17	1092	afp		834	jar	c	138
Group B	2a	17	1145	u		10	jar	c	140
Group B	2b	16	224	au		686	jar	c	129
Group B	2b	16	255	au	undisturbed	1202	jar	c	130
Group B	2b	16	442	au		1423	jar	c	131
Group B	2b	16	696	af	undisturbed	2238	jar	c	134
Group B	2b	16	4970	au		77	jar	u	132
Group B	2b	17	69	au		570	jar	c	128
Group B	2b	17	1002	cu	undisturbed	630	jar	c	137
Group B	2b	17	1121	u		4	jar	u	139
Group B	2d	17	736	u	undisturbed	unknown	loose/bag?	u	141
Group C	1a	21	768	af		474	jar	c	768
Group C	1c	21	769	afp		136	jar	c	769
Group C	1c	21	777	au		42	jar	c	777
Group C	1c	28	760	af	undisturbed	1120	jar	c	760
Group C	1c	28	795	afp		531	jar	u	795
Group C	1c	29	799	u		u	jar	u	799
Group C	2a	21	771	au		1123	jar	c	771
Group C	2a	21	773	af	undisturbed	831	jar	c	773
Group C	2a	21	774	am		699	jar	c	774
Group C	2a	21	775	am		723	jar	c	775
Group C	2a	21	778	af		362	jar	c	778
Group C	2a	28	763	amp	undisturbed	1242	jar	c	763
Group C	2a	28	798	cu		u	jar	c	798
Group C	2b	28	753	am	undisturbed	1499	jar	c	753
Group C	2b	28	766	au	undisturbed	1251	jar	c	766
Group C	2b	28	792	afp	undisturbed	324	loose/bag?	u	792
Group C	2b	28	796	au		44	loose/bag?	u	796
Group C	2c	21	776	am	undisturbed	643	jar	u	776

Group C	2c	28	752	afp	undisturbed	1281	jar	c	752
Group C	2c	28	762	au	undisturbed	564	jar	c	762
Group C	2c	28	764	au		57	jar	c	764
Group C	2c	28	785	afp	undisturbed	157	jar	c	785
Group C	2c	28	793	om		785	jar	c	793
Group C	3b	29	797	au		35	loose/bag?	u	797
Group C	3c	28	759	ofp		511	jar	c	759

6.3 Eastern Cemetery: catalogued 'pyre goods' and burnt animal bone from more definite cremation burials

Group	Phase	Plot	Burial	Type	Material	Notes
Group A	1d	2	343	mount/? belt plate	bo	distorted by heat, pierced with circular holes in ?"union jack" formation.
Group A	2a	3	231	pin	bo	or needle
Group A	2b	3	187	pig	b	right foreleg, young? (report suggests but not specific)
Group A	2c	2	399	pin	bo	fragment or needle shaft
Group A	2c	2	838	sheep(?)	b	includes above average number of sheep sized bones
Group A	2c	2	839	chicken	b	skeleton, prepared?
Group A	2c	2	842	sheep(?)	b	includes above average number of sheep sized bones
Group A	2d	2	850	frag	m	white metal frag (not silver)
Group A	3a	3	173	"mercury flask"	g	
Group A	3b	1	5	pig	b	partial skeleton, young?
Group A	3b	2	413	pig	b	left foreleg, young?
Group A	3c	2	333	pig	b	right foreleg, young?
Group A	3c	2	840	chicken	b	skeleton, prepared?
Group B	2a	17	1092	chicken	b	skeleton, prepared?
Group B	2b	16	696	chicken	b	skeleton, prepared?
Group C	1c	28	760	hinge terminal	bo	from casket on pyre?
Group C	2a	28	763	needle	bo	flattened head ?double pierced eye, four fragments
Group C	2a	28	763	needle	bo	presumably bone, slender, single eye? three fragments
Group C	2a	28	763	needle	bo	squared head, one circular eye
Group C	2a	28	763	hairpin	bo	two fragments, part of bead and reel head, trace of second reel above
Group C	2b	28	753	needle	bo	fragment from point
Group C	2c	28	752	chicken	b	skeleton, prepared?
Group C	2c	28	762	mount?	bo	fragment with small circular hole
Group C	3b	29	797	mount	bo	pear shaped drop with double cordon and groove at upper end.

6.4 Eastern Cemetery: ceramic primary containers

Group	Phase	Spatial sub group	Burial	Sex/age	Type	Quality	Provenance	Context
Group A	1c	2	556	au	jar		VW	399
Group A	1c	3	179	cu+iu	beaker		K	55
Group A	1c	3	268	ou	flagon	second?	VW	52
Group A	1d	2	343	amp	jar		AH	50
Group A	2a	2	290	afp	jar		VW	313
Group A	2a	3	231	af	jar		u	103
Group A	2b	2	297	au	jar		TK	61
Group A	2b	3	177	af	jar		TK	86
Group A	2b	3	180	iu	jar		TK	148
Group A	2b	3	185	yau	jar		TK	123
Group A	2b	3	187	cu	jar		TK	306
Group A	2c	1	2	u	jar		u	313
Group A	2c	2	325	am	jar	second?	TK	261
Group A	2c	2	335	ofp	jar		TK	71
Group A	2c	2	349	afp	jar		VW	349/350
Group A	2c	2	362	ou	jar		u	213
Group A	2c	2	388	u	jar	second	u	253
Group A	2c	2	399	ou+iu	jar		TK	191
Group A	2c	2	417	ou	jar		TK	328
Group A	2c	2	539	yau	jar		TK	502
Group A	2c	2	838	am	jar		TK	151
Group A	2c	2	839	af	jar	second	TK	136
Group A	2c	2	842	afp+iu	beaker		K	87
Group A	2c	3	175	u	jar		TK	98
Group A	2c	3	193	au	jar		TK	307
Group A	2c	3	251	afp	jar	second?	TK	146
Group A	2c	3	279	ou	jar		TK	10
Group A	3a	2	368	ofp	jar		u	284
Group A	3b	1	5	yaf	jar		u	323
Group A	3b	2	413	afp	jar		TK	339
Group A	3b	2	584	afp	jar		TK	374
Group A	3c	2	333	au	jar		u	91
Group A	3c	2	840	am	jar		u	119
Group A	4a	3	195	af or am	jar	second	AH	71
Group A	4a	3	195	af or am	flask	second	AH	72
Group B	2a	16	675	afp	jar		VW	?
Group B	2a	17	979	au	jar		u	979
Group B	2a	17	988	u	flagon		VW	988
Group B	2a	17	1092	afp	jar		VW	1092
Group B	2a	17	1145	u	jar		AH	1145
Group B	2b	16	224	au	jar		u	224
Group B	2b	16	255	au	jar		VW	?
Group B	2b	16	442	au	jar		u	442
Group B	2b	16	696	af	jar		TK	696
Group B	2b	17	69	au	jar		VW	69
Group B	2b	17	1002	cu	jar		VW	1002

Group B	2b	17	1121	u	jar		TK	1121
Group C	1a	21	768	af	jar		u	215
Group C	1c	21	769	afp	jar		AH	208
Group C	1c	21	777	au	jar		AH	143
Group C	1c	28	760	af	jar		AH	590
Group C	1c	28	795	afp	jar		VW	609
Group C	1c	29	799	u	jar		AH	3
Group C	2a	21	771	au	jar		VW	290
Group C	2a	21	773	af	jar		u	313
Group C	2a	21	774	am	jar		VW	251
Group C	2a	21	775	am	jar		u	309
Group C	2a	21	778	af	jar		VW	142
Group C	2a	28	763	amp	jar	second	VW	335
Group C	2a	28	798	cu	jar		u	61
Group C	2b	28	753	am	jar		TK	89
Group C	2b	28	766	au	jar		AH	415
Group C	2c	21	776	am	jar		AH	247
Group C	2c	28	752	afp	jar		TK	100
Group C	2c	28	762	au	jar		TK	332
Group C	2c	28	764	au	jar		TK	348
Group C	2c	28	785	afp	jar	second?	TK	816
Group C	2c	28	793	om	jar		TK	204
Group C	3c	28	759	ofp	jar		AH	?

6.5 Eastern Cemetery: secondary containers

Group	Phase	Plot	Burial	Sex/age	Material	Type	Vertical position	Location in pit	Context
Group A	1c	2	303	u	A	amphora			206
Group A	2a	2	290	afp	W	box?	up	c	
Group A	2a	3	231	af	A	amphora	up	c	102
Group A	2b	2	297	au	T	tile cist	s	nw	
Group A	2b	2	301	am	A	amphora	up		228
Group A	2c	2	325	am	A	amphora	up	c	260
Group A	2c	2	349	afp	A	amphora	up	c	257
Group A	2c	2	399	ou+iu	A	amphora			104
Group A	2c	2	417	ou	A	amphora	up	c	293
Group A	2c	2	838	am	A	amphora	up		144
Group A	2c	3	175	u	A	amphora	up	c	100
Group A	2c	3	251	afp	A	amphora	up	s	145
Group A	2d	2	567	yau	T	tile and mortar cist			
Group A	2d	2	568	au	T	tile and mortar cist			
Group A	3a	2	368	ofp	A	amphora	up	c	235
Group A	3a	3	173	u	W	box?	up		
Group A	3c	2	333	au	T	tile cist			
Group C	2b	28	753	am	A	amphora	up	c	72
Group C	2c	28	785	afp	A	amphora	up	c	769

6.6 Eastern Cemetery: accessory vessels

Group	Phase	Plot	Burial	Material	Type	Quality	Provenance	Location in pit	Context
Group A	2b	2	297	c	dish			lid	61
Group A	2b	2	301	c	flagon		BH	m	18
Group A	2b	2	301	c	flagon		BH	m	188
Group A	2c	2	325	c	dish			lid	262
Group A	2c	2	362	c	dish		special?	lid	213
Group A	2c	2	839	c	dish		K	s	135
Group A	2c	2	842	c	dish		K	lid	88
Group A	2c	3	175	c	flagon		NV/COL/OX	w	96
Group A	2c	3	175	c	flagon	second?	NV/COL/OX	w	97
Group A	2c	3	175	c	dish/bowl?	second	TK?	lid	99
Group A	2c	3	251	c	dish	second		lid	144
Group A	2c	3	279	c	dish			lid	10
Group A	3a	2	368	c	dish		special?	lid?	286
Group A	3a	2	368	c	dish	second	TK?	u	285
Group A	3a	3	173	c	beaker		import	se	59
Group A	3b	2	559	c	dish/bowl?		K	lid?	516
Group A	4a	3	195	c	beaker		NV	se	73
Group A	4a	3	195	c	bowl		AH/F	lid	70
Group B	2a	16	675	c	tazza			lid	675
Group B	2b	16	255	c	dog-dish			lid	255
Group B	2b	16	696	c	pie dish			lid	696
Group C	1c	28	760	c	flagon		VW	nw	563
Group C	2b	28	753	c	dish			lid	90
Group C	2c	28	785	c	dish			lid?	817
Group C	2c	28	793	c	dish			lid	581

6.7 Eastern Cemetery: other accessories

Group	Phase	Plot	Burial	Sex/age	Type	Material	Provenance	Location in pit	Context	Small Find No.
Group A	1b	3	176	u	coin	cu		m		136
Group A	1d	2	343	amp	bead	g		s		38
Group A	2a	2	290	afp	flint flake	st		m		748
Group A	2a	3	231	af	mirror	cu	import?	sw		104
Group A	2c	2	325	am	lamp	co	import	ne	272	272
Group A	2c	2	325	am	coin	cu		m		270
Group A	2c	2	335	ofp	bead	g		m		236
Group A	2c	2	362	ou	flint tool	st		m		754
Group A	2c	2	399	ou+iu	dish	pe		lid?	800	
Group A	2c	2	839	af	hairpin	bo		m		165
Group A	2c	2	839	af	hairpin	bo		m		166
Group A	2c	2	839	af	hairpin	bo		m		167
Group A	3a	2	368	ofp	pin	bo		se		255
Group A	3b	2	584	afp	coin	silver wash		m		375
Group A	3b	2	846	au	coin	m		m		35
Group A	3c	2	845	u	coin	ag		m		48
Group B	2a	16	675	afp	ring	cu		m		675

Group B	2a	17	1092	afp	mirror	cu	import?	m		1092
Group B	2a	17	1092	afp	mirror	cu	import?	m		1092
Group B	2a	17	1092	afp	coin	cu		m		1092
Group B	2a	17	1092	afp	unguent pot	g		m		1092
Group B	2a	17	1092	afp	ring	g		m		1092
Group C	2b	28	792	afp	coin	ag		m		761
Group C	2b	28	796	au	coin	ag		m		812
Group C	2c	28	785	afp	tube/wand?	cu		n	779	
Group C	3b	29	797	au	coin	silver wash		m		383

6.8 Eastern Cemetery: other contexts

Group	Phase	Plot	Burial	Sex/age	Type	Material	Location in pit	Context
Group A	1b	3	176	u	tile	cbm	lid	
Group A	1c	2	304	au	amphora	A	lid	322
Group A	1c	3	179	cu+iu	tile	cbm	lid	
Group A	1c	3	268	ou	lid	c		52
Group A	1d	2	343	amp	lid?	c	lid?	50
Group A	2a	2	290	afp	lid	c	lid	326
Group A	2a	3	231	af	marker?	cut		
Group A	2a	3	231	af	lid	c	lid	104
Group A	2a	3	231	af	stone	st	s	
Group A	2b	3	180	iu	tile	cbm	lid	
Group A	2c	2	325	am	tiles	cbm		
Group A	2c	2	349	afp	marker?	cut		
Group A	2c	2	399	ou+iu	human	b		399
Group A	2c	2	399	ou+iu	tiles	cbm		241/400/ 518/519
Group A	2c	2	838	am	ragstone	st	lid	
Group A	2c	2	839	af	tile	cbm	lid	
Group A	2c	2	839	af	marker?	st		
Group A	3a	2	368	ofp	marker?	cbm		
Group A	3a	2	368	ofp	tile	cbm		
Group A	3b	1	5	yaf	tile	cbm	lid	
Group A	3c	2	333	au	lid	c	lid	96
Group A	3c	2	840	am	tile	cbm	lid	
Group B	2a	17	1092	afp	lid	c	lid	1092
Group B	2b	16	442	au	tile	cbm	lid	442
Group B	2b	17	1002	cu	lid	c	lid	1002
Group C	1c	28	760	af	lid	c	lid	596
Group C	1c	28	795	afp	lid	c		610
Group C	2a	21	771	au	tile?	cbm	lid?	
Group C	2a	21	773	af	lid	c	lid	316
Group C	2a	21	775	am	lid	c		248
Group C	2a	28	763	amp	lid	c	lid	336
Group C	2a	28	763	amp	marker?	st		
Group C	2b	28	753	am	tile	cbm		
Group C	2b	28	766	au	lid	c	lid	428
Group C	2c	21	776	am	lid	c	lid	248
Group C	2c	28	752	afp	tiles	cbm	lid?	

Group C	3c	28	759	ofp	tile	cbm	lid

6.9 Eastern Cemetery: redeposited material

Group	Phase	Plot	Burial	Sex/age	Type	Material	Context
Group A	2a	2	323	au	human	b	323
Group A	2a	2	323	au	flask	cb	215
Group A	2a	2	460	au	human	b	460
Group A	2a	2	460	au	jar	cb	700
Group A	2b	2	337	afp	jar	cb	169
Group A	2b	2	337	afp	human	b	337
Group A	2c	2	317	iu	jar	cb	116
Group A	2c	2	317	iu	human	b	317
Group A	2c	2	317	iu	dish	c	121
Group A	2c	2	352	yafp+ofp	jar	cb	297
Group A	2c	2	352	yafp+ofp	human	b	352
Group A	2c	2	352	yafp+ofp	human	b	352
Group B	2a	17	610	u	human	b	142
Group B	2a	17	610	u	jar	cb	610
Group B	2a	17	735	au	human	b	143
Group B	2a	17	735	au	jar	cb	735
Group B	2a	17	1088	afp	jar	cb	1088
Group B	2a	17	1088	afp	human	b	145
Group B	2a	17	1095	u	human	b	146
Group B	2a	17	1095	u	jar	cb	1095
Group B	2a	17	1123	u	human	b	147
Group B	2a	17	1123	u	jar	cb	1123
Group B	2b	17	834	au	human	b	144
Group B	2b	17	834	au	jar	cb	834
Group B	2b	17	1131	u	jar	cb	1131
Group B	2b	17	1131	u	human	b	148
Group B	2b	17	1157	u	jar	cb	1157
Group B	2b	17	1157	u	human	b	149
Group C	1c	20	811	au	human	b	811
Group C	1c	20	811	au	jar	cb	140
Group C	1c	28	817	au+iu	human	b	817
Group C	1c	28	817	au+iu	jar	cb	405
Group C	1c	28	817	au+iu	human	b	817
Group C	1c	28	818	af	human	b	818
Group C	1c	28	818	af	jar	cb	550
Group C	2a	21	813	iu	human	b	813
Group C	2a	21	813	iu	jar	cb	166
Group C	2c	22	814	cu	human	b	814
Group C	2c	22	814	cu	jar	cb	330
Group C	3c	28	662	au	jar	cb	587
Group C	3c	28	662	au	human	b	662
Group C	3c	28	765	afp	jar	cb	598
Group C	3c	28	765	afp	pin/needle	bo	
Group C	3c	28	765	afp	chicken	b	
Group C	3c	28	765	afp	pig	b	
Group C	3c	28	765	afp	human	b	765

7. Gazetteers of case studies and associated sites

7.0 Each End, Ash

Ash, near Sandwich, Kent (VCH 3, Kent 1932, 144; Philpott 1991).	Amphora containing burnt bones, other pottery including a red dish associated. Undated.
Each End, Ash near Sandwich, Kent 1992 (Hicks 1992; 1998).	15 burials in 3 groups associated with road on sw/ne alignment. Mainly phase 2b, 1 amphora burial, 1 box, 1 prob. Casket and 1 burial with 10 accessory vessels; accessories diverse.
Island Road, Hersden, near Canterbury, Kent (Cross and Rady 2002)	As yet unpublished number of burials in a least 2 groups, diverse contents include 1 amphora burial (all contents within amphora, as yet unknown) and 'early' burial with 3 accessory vessels. Strip and map then left exposed for some time; burials truncated, no bone reports as yet.
Richborough Fort, Kent (Cunliffe 1968, 27–28; Philpott 1991)	Amphora burial with loose bagged deposit, Drag. 31 dish and hunt cup within plus adjacent narrow necked jar (phase 2b) and another burial with jar as primary container, containing also two small cups and two coins, with tile lid.
Sturry Gas Main, Hersden, near Canterbury, Kent 1994 (Rady 1995).	11 burials (watching brief), 21 vessels including dishes and flagons as well as jars. Apparent diversity among small groups in tight cluster. No post excavation analysis.
Westbere, Kent 1881 (Payne 1882; VCH 3, Kent 1932, 174, 175; Philpott 1991)	Possible amphora burial with large 'cinerary urn', 2 bowls and a dish. Undated; also another burial with early 1st century 'fibula [brooch] found with bones under inverted black platter' (loose/bagged burial with dish inverted as lid?); phase 1a.
Wickhambreaux, Kent (VCH 3, Kent 1932, 174; Philpott 1991).	Amphora burial with two accessory vessels. Undated.
Wingham, Kent (Dowker 1883, 356; Philpott 1991).	Probable amphora burial containing samian bowl. Undated.

7.1 Crundale Limeworks

Crundale Limeworks, Crundale, near Canterbury, Kent 1984 (Bennett 1985; archive).	8 burials from chalk quarry site (rescue excavation). Phases 1a–2b appear to range from west to east, latest are 3 amphora burials. Accessories diverse.
Godmersham, nr Canterbury, Kent 1678? (VCH 3 Kent 1932, 151; SMR No. 3858).	'a large urn [amphora?] containing a shallow earthen pan and a small inscribed [graffito?) urn...covered with a large flat stone, and round it was a wall of flints'
Julliberries Grave, Chilham, near Canterbury, Kent (Jessup 1939).	1 cremation burial in jar placed on dish.
St Augustines Hospital, Chartham, near Canterbury, Kent 1996 (Rady 1999).	1 burial in upper fills of backfilled secondary quarry on ridge (possibly near Roman road). Jar, flagon, dish; 574g, older female. Perhaps redeposited, original phase 1a. (Also an inhumation in the quarry).
Tremworth Down, Crundale, near Canterbury, Kent (Roach Smith 1856, 180–183; Philpott 1991).	Fausset's 1757 account of 11 burials, primary containers quite uniform (mainly jars), diverse accessory vessels including beakers, flagons and samian dishes; other accessories include glass vessels in burials 1 and 5, and a brooch and a knife from within primary container in burial 9. Miniature bottles also associated with burials 10 and 21, the latter within primary container. 'x' graffiti also found on samian dishes in burials 4, 9 and 10.

7.2 Canterbury

Canterbury: miscellaneous finds pre-1932 (Brent 1861; Pilbrow 1882; VCH 3 Kent, 1932, 75–80; Philpott 1991).	Reports of various Canterbury cemeteries and burials.
Cranmer House, London Road, Canterbury, Kent. 1982. (Frere et al 1987).	Approximately 53 burials north and south of boundary ditch, severely damaged. Phases 1a–2b, increasing accessory diversity, footwear tradition.
5, New Street, Canterbury, Kent 1984(?) (Taylor 1985).	'At least seven vessels' representing 3 burials, as well as glass phial and 2 glass gaming counters recovered from workmen's skip. Phase 2b.

30, North Lane, Canterbury, Kent 1989 (Leggatt 1991; Anderson 1991).	1 burial seen in section of evaluation trench, jar with beaker accessory, amphora sherd and tile fragment as lids; Phase 2b.
Old Dover Road, Canterbury, Kent. (VCH 3 Kent 1932, 77; Philpott 1991).	'Box burial' (with silver studs) with accessory vessels. Phase 2a.
Opposite no.s 5–7, New Street, Canterbury, Kent 1986(?) (Bennett 1986).	Remains of 4 burials 'truncated' by trench. No details.
Ramsgate Road, Canterbury, Kent (VCH 3, Kent 1932, 76; Philpott 1991).	2 elaborate 'casket burials' with silver fittings. Contents include enameled brooches, pendant, chatelaine etc. Phase 2b.
Rosemary Lane Car Park, Canterbury 1977 (Bennett et al 1982; Philpott 1991[as 'Canterbury Castle'] and archive).	2 burials, phase 1b. Adjacent, both elaborate, sharing several characteristics, 1 is a 'double burial' including young adult and child remains. Stack of tile may indicate marker.
St. Dunstans Terrace, Canterbury, Kent 2000. (Rady 2000; Diack 2003; archive).	Up to 97 cremation burials to north of obvious boundary ditch to cemetery. Phases Mainly phases 1a–2b, a core of relatively non-elaborate burials with others increasingly diverse in terms of accessories, footwear tradition matches adjacent Cranmer House site.
St. Martins Hill, Canterbury, Kent 1927. (Whiting and Mead 1928; Philpott 1991).	At least 5 burials although some 'groups' uncertain. Considerable diversity: 1 burial with a jar as primary container only, except 2 rings, a mirror and a brooch within jar, others with varied accessory vessels including quite frequent samian. 1 amphora burial with amphora 'used as urn' accompanied by 2 samian bowls and a beaker, 1 decorated pot lid used. Possibly phases 1b–2b.
Telephone Repeater Station, St Dunstans, Canterbury, Kent 1926 (Whiting 1927).	On site of more recent St Dunstan's Terrace excavation, up to 9 burials although several groups uncertain, phasing probably 1b–2b. Somewhat diverse accessory vessels including 4 samian dishes (one used as lid) no other accessories recorded.
3, Thannington Road, Canterbury Kent (SMR No. 4820).	Tile cist containing jar(?) as primary container(?), 2 samian dishes (18/31 and 33), dish, ring necked flagon and bag shaped beaker. Phase 2a.
Vauxhall, Canterbury, Kent 1870 (VCH 3, Kent, 1932, 76; Philpott 1991).	South Spanish Amphora burial, no details and undated.

7.3 Colchester

Abbey Field, Colchester, Essex 2001 (Crossan 2001).	72 cremation burials reported; mainly phases 2c and 3b. Second–third century non-elaborate tradition and concurrent group with diverse accessories. Possible 'Brandschuttgräber' tradition. Several undefined burials.
Butt Road, Colchester, Essex 1976–9, 1986 and 1989 (Crummy and Crossan 1993).	Only 5 cremations (of over 700 burials) several of which believed by excavators to have been "redeposited". Phase 2b, 1 in jar with lid in tile cist, others less elaborate, but all different.
Colchester: various materials from burials held in Colchester Museums as catalogued buy M.R. Hull (May 1930, 289; Hull 1958; 1963; Toynbee 1971; Philpott 1991; P. Crummy 1993).	Mostly formed of the 19th century Taylor, Joslin and Jarmin collections (catalogued by May), with later additions by Hull; many of the 'groups' are uncertain (Crummy 1993). All phases but mainly elaborate burials represented.
'Colchester' Essex (Collingwood and Taylor 1928, 203; Philpott 1991).	Prob. Casket with silver fittings, Neronian coin (heirloom?) and Antonine samian. Phase 2b.
'Colchester' Essex (Smith 1922, 97; Philpott 1991).	Burial with jar(?) and glass phial as well as a *ligula*, bone box and a mirror. Phase 1a. Also burial (loose?) with flagon and bowl in tile cist. Phase 2a.
East of Colchester North Station, Colchester, Essex 1844–7 (Wire 1846, 239–239; 1847, 275; Hull 1958, 257; VCH Essex, 118; Philpott 1991).	2 amphora burials, one with glass vessels including primary container, one with coins, ceramic primary container with lid and glass phial. Phase 2b.
Sheepen, Colchester, Essex 1970–71 (Niblett 1985; Phillip Crummy, *pers. Comm.*).	5 'pre-flavian' burials recovered in difficult conditions (P. Crummy had to buy vessels from construction worker!), possibly within enclosure; burials apparently notable for high quality contents including glass dish and flagon, wood and leather casket with brass studs and ornamental lock plate, rings and beads, a jar, Gallo-Belgic and samian cups, butt beakers and a flask. Groups uncertain. Phase 1a.
St. Clare Drive, Colchester, Essex (Hull 1942, 59–65; Philpott 1991).	Possible box or casket burial seems to be extraordinarily elaborate, containing 10 continental brooches, 2 bracelets, a glass phial as well as 2 flagons, 5 bowls and 5 dishes (including samian). Check Hull 1942, perhaps multiple burial?
St John's Street, Colchester, Essex 1985 (Frere 1987, 333; Philpott 1991).	Inverted Colchester type amphora, lower half placed over upper, also bone pin, brooch and fragments of beads 'in urn'.
15–17, The Avenue, Colchester, Essex 1975 (Essex SMR No. 13266).	Watching brief conditions: 'two Flavian cremation urns with contents...broken and mixed when removed with mechanical digger'. Phase 1a.

Turner Rise, Colchester, Essex 1997 (Shimmin 2003).	60 burials reported (considerable destruction before and during excavation). Mainly phases 1a–1b; several box burials associated with increased accessories. Possible 'Brandschuttgräber' tradition. Several undefined burials.
9–10, Vint Crescent, Colchester, Essex 1984 (Essex SMR No. 13326).	Watching brief conditions: several burials but groups unknown. Undated.
West of Altnacealgach, Colchester, Essex 1907 (Hull 1958, 252; VCH 3 Essex, 118; Philpott 1991).	An amphora burial(?), no further detail.

7.4 East London

Bank Station, London (RCHME 1928, 155; Philpott 1991).	Amphora burial with jar and bowl, bone in both. Phase 1a.
Blackwall Yard, Aldgate Extension, London 1882 (Hall 1996, 70; Barber and Bowsher 200, 336).	A 'pottery cremation urn'.
Between Prescott Street and Tenter Street, London 1936 (Hall 1996, 73; Barber and Bowsher 2000, 338).	2 burials with single black burnished and grey ware jars(?) as primary containers.
41 Canon Street Road, London 1919 (Hall 1996, 73; Barber and Bowsher 2000, 338).	Black jar(?) with burnt bone.
Co-operative Wholesale Society, Leman Street, London (Hall 1996, 73; Barber and Bowsher 2000, 338).	Amphora burial with tile lid, containing burnt jar as primary container with as well as copper pin. Phase 2a.
Eastern cemetery sites, London 1975–1990 (Barber and Bowsher 2000).	136 cremation burials, 550 inhumations, 165 features identified as disturbed burials. Phases 1a–4a; many undefined or redeposited burials, but more certain burials in original contexts tend to have few or no accessories (although diversity increases in line with overall numbers in second century).

Great Alie St., London (RCHME 1928, 159; Philpott 1991; Hall 1996, 72; Barber and Bowsher 2000, 338).	Amphora containing grey ware jar(?) with dish as lid. Phase 2a.
Haydon Square, London 1797; 1891–2 (RCHME 1928, 157; Hall 1996, 71; Barber and Bowsher 200, 337).	2 burials in ceramic primary containers with glass vessels. Undated. Later 2 'cremation jars(?)' (1a flagon). Undated.
Holy Trinity Church, Minories, London (Hall 1996, 70; Barber and Bowsher 200, 337).	Ceramic primary container with lid. Undated.
Leman St./Great Prescott St., London (Taylor 1936, 213; Philpott 1991).	Globular amphora containing(?) jar(?) with lid. Phase 2b.
Little Alie Street, Whitechapel, London 1913 (RCHME 1928, 159; Philpott 1991; Hall 1996, 72; Barber and Bowsher 2000, 338).	2 jars as primary containers, one containing iron brooch, another jar, a bowl, a samian dish and glass phial associated. Phase 1a.
Liverpool Street, London (RCHME 1928, 159; Philpott 1991).	Amphora containing 'two cinerary urns'. Phase 2b.
Mansell Street, London 1843 (RCHME 1928, 157; Philpott 1991; Barber and Bowsher 2000, 338).	Jar as primary container, also glass phial. Phase 2a. Also amphora with hole in base 'said to have contained ashes' (phase 2b?), other jars(?) with lids.
Old Ford, London (RCHME 1928, 164; Philpott 1991).	Amphora burial with loose bagged bone deposit? Phase 2a.
Opposite Metropolitan Railway Station, Aldgate, London 1902 (Hall 1996, 70; Barber and Bowsher 200, 335).	'Grey ware pot' as primary container. Undated.
6–13, Spital Square, London (Taylor 1936, 256; Philpott 1991).	Amphora containing 'urn'. Undated.

6–13 Spital Square, London (Taylor 1936, 256; Philpott 1991).	2 burials in jars each in a 'brick cist'. Not dated.
14–18, St Clare Street, London 1965 (Hall 1996, 71; Barber and Bowsher 2000, 337).	1 burial with single ceramic primary container (grey ware) and lid; number of burials unclear; 1 had pipe clay cockerel placed upright beside the 'burial'. Phase 1b?
West Tenter Street, London 1984 (Whytehead 1986; Philpott 1991, Barber and Bowsher 2000).	120 inhumations, 14 cremation burials in situ and 'at least 7 redeposited cremation urns'. Mainly lacking accessories, but 1 burial (1092) particularly elaborate in terms of other accessories.
Whitechapel, London (Cuming 1877, 337; Philpott 1991).	Amphora burial containing jar(?) with bones. Undated.
Whitechapel, London (Hall 1996, 70; Barber and Bowsher 200, 336).	Amphora with an jar(?), copper statuette, and mirror.